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Ontario · Legislative Assembly

SESSIONAL PAPERS

VOL. LIII.—PART IV

SECOND SESSION

OF THE

FIFTEENTH LEGISLATURE

OF THE

183026.

PROVINCE OF ONTARIO

15·8·23.

SESSION 1921

TORONTO:
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1922

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Game and Fisheries, Report	14	*Printed.*
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No. 1 — Public Accounts of the Province for the year ending 31st October, 1920. Presented to the Legislature, 11th February, 1921. *Printed.*

No. 2 — Estimates—Supplementary for the service of the Province for the year ending 31st October, 1921. Presented to the Legislature, 15th February, 1921. *Printed.* Further supplementary estimates presented to the Legislature 15th April, 1921. *Printed.* Estimates for the year ending October 31st, 1922. Presented to the Legislature, 21st April, 1921. *Printed.*

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No. 3 — Report of the Minister of Lands and Forests for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*

No. 4 — Report of the Department of Mines for the year 1920. Presented to the Legislature, 21st March, 1921. *Printed.*

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No. 5 — Report of the Inspector of Division Courts for the year 1920. Presented to the Legislature, 7th February, 1921. *Printed.*

No. 6 — Report of the Inspector of Legal Offices for the year 1920. Presented to the Legislature, 21st March, 1921. *Printed.*

No. 7 — Report of the Inspector of Registry Offices for the year 1920. Presented to the Legislature, 21st March, 1921. *Printed.*

No. 8 — Report of the Provincial Municipal Auditor for the year 1920. Presented to the Legislature, 15th February, 1921. *Printed.*

No. 9 — Report of the Commissioners for the Queen Victoria Niagara Falls Park for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*

No. 10 — Report of Superintendent of Insurance for the year 1920. Presented to the Legislature, 15th February, 1921. *Printed.*

No. 11 Report of the Registrar of Friendly Societies for the year 1920. Presented to the Legislature, 15th February, 1921. *Printed.*

No. 12 Loan and Trust Corporations' statement being abstracts from financial statements made by building societies, loan companies, loaning land companies and trust companies for the year ended Decem- 31st. 1919. Presented to the Legislature, 1st February, 1921. *Printed.*

Report of the Registrar of Loan Corporations for the year 1920. Presented to the Legislature, 15th February, 1921. *Printed.*

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No. 13 Report of the Minister of Public Works for the year 1920. Presented to the Legislature, 15th February, 1921. *Printed.*

No. 14 Report of the Game and Fisheries Department for the year 1920. Presented to the Legislature, 7th March, 1921. *Printed.*

No. 15 Report of the Department of Public Highways for the year 1920. Presented to the Legislature, 28th April, 1921. *Printed.*

No. 16 Report of the Department of Labour for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*

No. 17 Report of the Minister of Education for the year 1920. Presented to the Legislature, 13th April, 1921. *Printed.*

No. 18 Report of the Board of Governors of the University of Toronto for the year ending 30th June, 1920. Presented to the Legislature, 2nd February, 1921. *Printed.*

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No. 19 Report of the Secretary and Registrar of the Province for the year 1920. Presented to the Legislature, 28th April, 1921. *Printed.*

No. 20 Report of the Registrar-General relating to the Registration of Births, Marriages and Deaths for the year ending 1920. Presented to the Legislature, 1st March, 1921. *Printed.*

No. 21 Report of the Provincial Board of Health for the year 1920. Presented to the Legislature, 11th February, 1921. *Printed.*

No. 22 Report of the Inspector of Prisons and Public Charities upon the Ontario Hospitals for the Insane for the year 1920. Presented to the Legislature, 13th April, 1921. *Printed.*

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No. 24 No Report.

No. 25 Report upon the hospitals and charitable institutions for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*

No. 26 Report upon the prisons and reformatories for the year 1920. Presented to the Legislature, 13th April, 1921. *Printed.*

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No. 27 Report upon the neglected and dependent children for the year 1920. Presented to the Legislature, 29th April, 1921. *Not Printed.*

No. 28 Report upon the operation of the Ontario Temperance Act for the year 1920. Presented to the Legislature, 14th February, 1921. *Printed. Part 6, 1920, Sess. Vol.*

No. 29 Report of the Minister of Agriculture for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 30 Report of the Ontario Agricultural College and Experimental Farm. for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 31 No Report.

No. 32 Report of the Agricultural and Experimental Union for the year 1920. Presented to the Legislature, 27th April, 1921. *Printed.*

No. 33 Report of the Stallion Enrolment Board for the year 1920. Presented to the Legislature, 1st February, 1921. *Printed.*

No. 34 Report of the Vegetable Growers' Association for the year 1920. Presented to the Legislature, 27th April, 1921. *Printed.*

No. 35 No Report.

No. 36 Report of the Entomological Society for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 37 Report of the Beekeepers' Association for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 38 Report of the Dairymen's Associations for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 39 Report of the Live Stock Branch for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 40 Report *re* Housing of the Bureau of Municipal Affairs for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*

No. 41 Report of the Women's Institutes for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 42 Report of the Agricultural Societies and the Convention of the Ontario Associations and Exhibitions for the year 1920. Presented to the Legislature, 16th February, 1921. *Printed.*

No. 43 Report of the Horticultural Societies for the year 1920. Presented to the Legislature, 27th April, 1921. *Printed.*

No. 44 Report of Fruit Growers' Association for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

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No. 45 No Report.

No. 46 Report of the Statistics Branch of the Department of Agriculture for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

No. 47 Report of Bureau of Municipal Affairs for the year 1920. Presented to the Legislature, 11th February, 1921. *Printed.*

No. 48 Report of the Temiskaming and Northern Ontario Railway for the year 1920. Presented to the Legislature, 10th March, 1921. *Printed.*

No. 49 Report of the Hydro-Electric Power Commission for the year 1920. Presented to the Legislature, 4th April, 1921.

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No. 50 Report of The Ontario Railway and Municipal Board for the year 1920. Presented to the Legislature, 21st March, 1921. *Printed.*

No. 51 A Return from the Records of the By-Elections to the Legislative Assembly held on the 19th day of July and the 8th day of November, 1920, shewing:—

(1) The number of Votes Polled for each Candidate in each Electoral District in which there was a contest; (2) The majority whereby each successful Candidate was returned; (3) The total number of Votes Polled; (4) The number of Votes remaining unpolled; (5) The number of names on the Polling Lists; (6) The number of Ballot Papers sent out to each Polling Place; (7) The Used Ballot Papers; (8) The Unused Ballot Papers; (9) The Rejected Ballot Papers; (10) The Cancelled Ballot Papers; (11) The Declined Ballot Papers; (12) The Ballot Papers taken from Polling Places; (13) A General Summary of Votes cast in each Electoral District. Presented to the Legislature, 25th January, 1921. *Printed.*

No. 52	Report of the Bureau of Archives for the Province of Ontario, 1920. Presented to the Legislature, 15th April, 1921. *Printed.*
	—Supplement to Report of the Bureau of Archives, 1920. Presented to the Legislature, 27th April, 1921. *Printed.*
No. 53	The Report of the Librarian on the state of the Library. Presented to the Legislature, 26th January, 1921. *Not Printed.*
No. 54	Auditor's Report for the year 1919-20. Presented to the Legislature, 8th March, 1921. *Printed.*
No. 55	Report of the Workmen's Compensation Board for 1920. Presented to the Legislature, 28th April, 1921. *Printed.*
No. 56	Report on the Administration of Criminal Justice and Treatment of Prisoners in New York, Chicago, Detroit and Toronto, by His Honour Judge Coatsworth, Senior Judge of the County of York, Province of Ontario. Presented to the Legislature, 5th April, 1921. *Printed.*
No. 57	Report of the Ontario Board of Parole for the year ending 31st October, 1920. Presented to the Legislature, 21st February, 1921. *Printed.*
No. 58	Report of the Committee on Rural Credits. Presented to the Legislature, 11th February, 1921. *Printed.*
No. 59	Report of the Select Committee of the Legislative Assembly, as to a more equitable system of distribution of Hydro-Electric power and a more uniform price. Presented to the Legislature, 26th January, 1921. *Printed.*
No. 60	Statement of the distribution of the Revised and Sessional Statutes for the year 1920. Presented to the Legislature, 1st February, 1921. *Not Printed.*
No. 61	Regulations and Orders-in-Council passed since the last Session of the Legislature under the authority of the Department of Education Act, or of the Public Schools, Separate Schools or High Schools. Presented to the Legislature, 1st February, 2nd February, 14th February, 7th March, 21st March, 13th April, 1921. *Not Printed.*
No. 62	Interim Report *re* Issuers of Marriage Licenses, Public Service Commission. Presented to the Legislature, 11th February, 1921. *Printed.*
No. 63	Interim Report of the Public Service Commission *re* Police Magistrates. Presented to the Legislature, 11th February, 1921. *Printed.*

No. 64 The Minister of Lands and Forests presented to the House, a Return to an Order of the House showing 1. How many Timber Limits have been offered for sale since 1st December, 1919, and where situated. 2. Were they all sold by tender. 3. The date of sale, area, and price paid. 4. Were any withdrawn after being advertised, and if so, why. 5. How many tenders were received in each case. 6. The name of the successful tenderer. 7. The amount of bond given in each case by the successful tenderer. Presented to the Legislature, 16th February, 1921. Mr. *Tolmie*. *Not Printed.*

No. 65 Report of the Commission to enquire into and report upon a basis for determining the financial obligations of the Province toward the University of Toronto, and the financial aid which the Province may give to Queen's University of Kingston and the Western University of London, etc., etc. Presented to the Legislature, 21st February, 1921. *Printed.*

No. 66 Return to an Order of the House of the 14th day of February for a Return showing dates when tenders called for, the tenders received and the names of tenderers for the production of (*a*) Ontario Public School Readers, each respectively; (*b*) Ontario Public School Histories, each respectively; (c) Ontario High School History; (*d*) Ontario Composition and Grammar. Presented to the Legislature, 21st February, 1921. Mr. *Sinclair*. *Not Printed.*

No. 67 Interim Reports (First, Second and Third) of the Commission to investigate and report upon the accuracy or otherwise of all returns made pursuant to The Crown Timber Act, sec. 14, by any holder of a Timber License, etc., etc., etc. Presented to the Legislature, 23rd February, 1921. *Printed.*

No. 68 Return to an Order of the House of the 23rd February, 1921, for a Return of copies of all correspondence between the Minister of Lands and Forests, the Prime Minister, or any Minister of the Government and any official, representative or solicitor on behalf of the Spruce Falls Pulp & Paper Co., together with all estimates, reports, conditions of sale, maps, documents and papers of every kind and nature, relating to (1) The sale of the Kapuskasing Soldiers' and Sailors' Settlement Colony; (2) The additional area acquired by the Company to add to the concession known as the Kapuskasing Pulp Concession; (3) Relating to the establishment of the Government Town Site at Kapuskasing. Presented to the Legislature, 24th February, 1921. Mr. *Magladery*. *Not Printed.*

No. 69 Annual Report of the Soldiers' Aid Commission of Ontario for year ending 31st October, 1919. Presented to the Legislature, 1st March, 1921. *Not Printed.*

No. 69 Report of Soldiers' Aid Commission for the year 1920. Presented to the Legislature, 21st March, 1921.

No. 70 Return to an Order of the House of 23rd February, 1921, that there be laid before the House, a Return showing the number of Issuers of Marriage Licences in the Province of Ontario, with their names and addresses and the date of their appointment. Presented to the Legislature, 1st March, 1921. Mr. *Ross,* Kingston. *Not Printed.*

No. 71 Return to an Order of the House of 9th February, 1921, that there be laid before the House a Return of copies of all correspondence, papers and documents since 13th November, 1919, relating to conduct or duties of Magistrates, Justices of the Peace and other officers with reference to enforcement of The Ontario Temperance Act. Presented to the Legislature, 1st March, 1921. Mr. *Hill. Not Printed.*

No. 72 Return to an Order of the House of 23rd February, 1921, that there be laid before the House a Return of copies of the Report of the Superintendent of Provincial Police to the Attorney-General for the years 1918, 1919 and 1920. Presented to the Legislature, 1st March, 1921. Mr. *Godfrey. Not Printed.*

No. 73 Return to an Order of the House of 23rd February, 1921, for a Return showing copy of Agreement between Provincial Board of Health and Federal Health Department relating to prevention of Venereal Diseases. 2. What amount has already been received by the Province to date. Presented to the Legislature, 4th March, 1921. Mr. *Price. Not Printed.*

No. 74 Return to an Order of the House of 4th February, 1921, for a Return of copies of all correspondence passing between the Government of Ontario or any member, officer or official thereof, or of any department thereof and any member of the House or other person leading up to it, and dealing with the suspension and resignation of Messrs. Smith and Hanna from the Provincial Police. Presented to the Legislature, 4th March, 1921. Mr. *Tolmie. Not Printed.*

No. 75 Return to an Order of the House of the 4th February, 1921, for a Return of copies of all correspondence with and by the Government or any department thereof leading up to and relating to the dismissal of Mr. Lewis R. Luke as License Inspector for Ontario County. Presented to the Legislature, 4th March, 1921. Mr. *Sinclair. Not Printed.*

No. 76 Statement and Report of the Ontario Athletic Commission and of Auditor for the year 1920. Presented to the Legislature, 4th March, 1921. *Not Printed.*

No. 77 Report of the Commission upon the rates of wages paid to men employed by The Hydro-Electric Power Commission in the construction of the Queenston-Chippewa Development. Presented to the Legislature, 4th March, 1921. *Printed.*

No. 78 Return to an Order of the House of 28th February, 1921, that there be laid before the House a Return of copies of all letters, reports and communications of every kind received by the Minister of Mines or any member of the Government with respect to the proposed increase in mining taxes. Presented to the Legislature, 9th March, 1921. Mr. *Ferguson.* *Not Printed.*

No. 79 Return to an Order of the House of 23rd February, 1921, for a Return of copies of all correspondence between the Government or any member or any Minister or official and the Canada Copper Company (International Nickel Company) and George E. Buchanan relating to leases or grants of nickel-bearing or other mineral lands in the Township of Creighton, District of Sudbury, since 13th November, 1919. Presented to the Legislature, 10th March, 1921. Mr. *Dewart.* *Not Printed.*

No. 80 Interim report respecting Coroners of the Commission to inquire, consider and report upon the best mode of selecting, appointing and remunerating Sheriffs, etc., etc. Presented to the Legislature, 18th March, 1921. *Printed.*

No. 81 Report of the Committee on Proportional Representation. Presented to the Legislature, 5th April, 1921. *Printed.*

No. 82 Return to an Order of 16th February, 1921, that there be laid before the House a Return showing what are the amounts paid by each Company respectively which make up the total credited to The Mining Tax Act in the Public Accounts for 1920 at page *a*31 under the heading: (*a*) Acreage tax, $71,223.26; (*b*) Profits tax, $713,291.46. Presented to the Legislature, 21st March, 1921. Mr. *McAlpine.* *Not Printed.*

No. 83 Return to an Order of the House, of 9th February, 1921, that there be laid before the House a Return showing:—1. What was the total quantity of fish caught in Lake Nipissing and Lake Nipigon, respectively, and marketed in the following years—1917, 1918, 1919 and 1920. 2. What were the varieties of fish caught and marketed in Lake Nipissing and Lake Nipigon respectively, and

the quantity of each. 3. What was the price paid to fishermen for each variety; what was the price at which the Government sold each variety; to whom were such sales made. 4. To whom were licenses issued to take fish from Lake Nipissing and Lake Nipigon respectively, in the years 1917, 1918, 1919 and 1920. 5. Is it the intention of the Government to continue this Fishery Department as a commercial enterprise. 6. What were the gross receipts from fish sales in Lake Nipissing and Lake Nipigon in the years 1917, 1918, 1919 and 1920, and what were the net profits of the Government in each of said years. Presented to the Legislature, 1st April, 1921. Mr. *Mageau*. *Not Printed.*

No. 84 Return to an Order of 23rd February, 1921, that there be laid before the House a Return showing the number of convictions made under The Ontario Temperance Act for breaches of the said Act for year 1919-20: 1. At the instance of officers of the Board of License Commissioners. 2. At the instance of officers of the Ontario Provincial Police. 3. At the instance of Municipal Police officers. 4. The number of cases in which fines or sentences have been remitted, reduced, or commuted: (1) Upon the recommendation of the Board of License Commissioners; (2) Without the recommendation of the Board of License Commissioners. Presented to the Legislature, 13th April, 1921. Mr. *Godfrey*. *Not Printed.*

No. 85 Copy of Report of R. D. Johnson *et al* on the Queenston-Chippawa Power Development, with statement of professional record of H. S. Kerbaugh and Francis Lee Stuart, with letters. Presented to the Legislature, 13th April, 1921. *Printed.*

No. 86 Report of R. S. Lea, Consulting Engineer of Progress on Queenston-Chippawa Power Development, 31st January to 9th April, 1921. Presented to the Legislature, 13th April, 1921. *Printed.*

No. 87 Report of the Civil Service Commissioner for Ontario, 1920. Presented to the Legislature, 15th April, 1921. *Printed.*

No. 88 First Annual Report of The Mothers' Allowances Commission for the year 1920. Presented to the Legislature, 20th April, 1921. *Printed.*

No. 89 Final Report of Hugh L. Cooper & Co. *re* Queenston-Chippawa Development of the Hydro-Electric Power Commission of Ontario. Presented to the Legislature, 21st April, 1921. *Printed.*

No. 90 Return to an Order of the House of the 25th February, 1921, that there be laid before this House a Return showing:—1. How many miles are included in the Ottawa-Prescott Highway. 2. How

many miles of this Highway were completely graded at the end of the year 1920. 3. How much grading still remains to be done. 4. What was the average cost *per* mile of the grading completed. 5. What amount was spent during the year 1920 on equipment for the Ottawa-Prescott Highway. 6. How many men were employed in each of the months of 1920. 7. Has the Government purchased any gravel pits or stone quarries along or in the vicinity of the right-of-way of the Ottawa-Prescott Highway, and if so (*a*) From whom; (*b*) What was paid for each; and (*c*) What was the area of each. 8. Has the Government rented any gravel pits or stone quarries along or in the vicinity of the right-of-way of the Ottawa-Prescott Highway, and if so (*a*) From whom; (*b*) What was paid for each; and (*c*) What was the area of each. 9. Did the Government purchase any gravel or stone for the right-of-way of the Ottawa-Prescott Highway, and if so (*a*) From whom; (*b*) What was paid per cubic yard; and (*c*) What was the total amount paid each man. 10. How many culverts were built during the year 1920. 11. How many still remain to be completed. 12. How many culverts were built (*a*) By day labour; (*b*) By contract. 13. If any were built by the latter (*a*) Who were the contractors; (*b*) What were the unit prices paid; (*c*) What lump sums were paid to each contractor. 14. What was the cost *per* cubic yard of the said culverts in place built by day labour. 15. What was the cost *per* cubic yard of the said culverts in place built by contract. 16. What was the total amount spent on the Ottawa-Prescott Highway to 31st December, 1920. 17. Have the plans of the said Highway been filed in the Federal Department of Railways pursuant to the Canada Highways Act, and if so, when. 18. Has a subsidy agreement been signed with the Dominion Government pursuant to the Canada Highways Act. 19. If so, what is the date of the agreement. 20. Has the Government received any payments on account of Dominion Government subsidy, and if so, the dates and amounts of the payments. 21. What wages were paid during 1920, on the Ottawa-Prescott Highway (*a*) For unskilled labour; (*b*) For teams with driver. 22. How many hours a day did the men employed on the road during 1920 work. 23. Who was the engineer in charge of the road during 1920, and what was his salary. 24. Has the Government settled with all the parties from whom the right-of-way was acquired. 25. If the answer to 24 is in the negative, what parties still remain to be settled with. Presented to the Legislature, 28th April, 1921. Mr. *Hill*. *Not Printed.*

No. 91 Return to an Order of 4th March, 1921, that there be laid before this House a Return showing:—1. What places in the City of Toronto are employed for Government use outside the Legislative Building. 2. For what Department, Commission or Board are they being used. 3. What are the terms of rental or lease. 4. How much has been expended on improvements on each place

to date. 5. On what dates was possession taken under the different leases. 6. How many employees are at work in each of the respective buildings so leased. Presented to the Legislature, 29th April, 1921. Mr. *Ross,* Kingston. *Not Printed.*

No. 92 Return to an Order of 21st February, 1921, that there be laid before this House a Return of copies of all papers and correspondence between the Government or any member thereof or any official on behalf of the Government and any other Corporation or person relating to: (*a*) Loan "R.R." sold to syndicate composed of the Dominion Securities and others: (*b*) Loan for $16,000,000 at 6 *per cent.,* repayable in fifteen years for which the price of 92.34 was realized; (*c*) The loan "S.S." sold to the syndicate composed of Aemilius Jarvis and others; (*d*) The loan for $10,000,000 at 6 *per cent.,* repayable in twenty years for which the price of 96.787 was realized. Presented to the Legislature, 29th April, 1921. Mr. *Hay. Not Printed.*

No. 93 Copies of Orders-in-Council designating, pursuant to section 14 of The Hospitals and Charitable Institutions Act, Hospitals, Refuges, Orphanages and Infants' Homes, to which aid be granted. Presented to the Legislature, 29th April, 1921. *Not Printed.*

No. 94 Report of the Commission to inquire into and report upon the truth or falsity of the charges made against David Hastings, Police Magistrate, Dunnville. Presented to the Legislature, 29th April, 1921. *Not Printed.*

REPORT

OF THE

Minister of Public Works

FOR THE

PROVINCE OF ONTARIO

FOR THE

TWELVE MONTHS ENDING 31st OCTOBER

1920

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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To His Honour, LIONEL H. CLARKE, ESQ.,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by the Ontario Public Works Act I submit for the information of Your Honour and the Legislative Assembly, the Annual Report of the works under the control of the Public Works Department, comprising the Reports of the Deputy Minister, the Architect, the Engineers, the Accountant and Law Clerk, for the twelve months ending the 31st of October, 1920.

Respectfully, submitted,

F. C. BIGGS,

Minister of Public Works and Highways.

Department of Public Works, Ontario,
February 14th, 1920.

REPORT

OF THE

Deputy Minister of Public Works

HONOURABLE F. C. BIGGS,

Minister of Public Works and Highways, Ontario.

SIR,—I have the honour to transmit the annual reports of the Architect, Engineer, the Secretary and Law Clerk and the Accountant Public Works Department for the fiscal year ending October 31st, 1920.

The Department of Public Works expended during the fiscal year 1920 the sum of $1,955,951.43; The Architect's Branch expended on Public Buildings $1,239,824.74, of which sum $156,235.71 was paid from monies received from the Federal Government as subsidy for encouragement of Agriculture. The sum of $402,279.88 was expended for the maintenance and repair of government buildings in the City of Toronto. The Engineer's Branch expended on improvements of in-land navigation on the construction of roads and bridges and drainage of lands, chiefly in the Northern portion of the Province, the sum of $313,846.80.

The character of the buildings and works are shown in the following table, which gives the total expenditure since the inception of the Department at Confederation of the Dominion of Canada on July 1st, 1867. The expenditure on Colonization and Mining roads, Aid to Railway Construction and Highway Improvement is also included, all of which have at some time been attached to the Department of Public Works. The importance of Highway Improvement in older Ontario led to the formation of a separate Department of Highways in the year 1916.

PUBLIC BUILDINGS:—			
Parliament and Departmental Buildings and Government House	$4,655,590 15	$49,969 89	$4,705,560 04
Hospital for Mental Disease and Feeble Minded	10,311,891 57	481,387 78	10,793,279 35
Penal Institutions	3,962,675 17	174,571 79	4,137,246 96
Educational Institutions	3,314,147 53	250,135 51	3,564,283 04
Agricultural Institutions	1,874,196 81	207,418 78	2,031,615 59
Administration of Justice	1,533,280 77	68,215 66	1,601,496 43
Miscellaneous expenditure	112,446 21	8,125 33	120,571 54
	$25,764,228 21	$1,239,824 74	$27,004,052 95

Character of Buildings and Works.	Expended 1st July, 1867, to 31st October, 1919.	Expenditure Fiscal year ending 31st Oct., 1920.	Total expenditure 1st July, 1867 to 31st October, 1920.
PROVINCIAL ENGINEERING WORKS:—			
Improvement of Inland Navigation, such as locks, dams, etc., at first for colonization purposes but which has now developed into most attractive and lucrative tourist resorts in the noted Muskoka Lakes. Improvement in transportation such as roads, bridges, etc., drainage of lands and roads, aid to municipalities in grants, advances, etc.	$4,267,552 19	$313,846 80	$4,531,393 99
Colonization and Mining roads	9,361,305 05	451,803 59	9,813,113 64
Good roads, Highway Improvement now under Department of Highways	5,430,607 47	7,752,269 75	13,182,877 22
Aid to Railways	10,118,145 90	139,112 54	10,257,258 44
	$54,941,833 82		$74,838,701 24

Parliament and Departmental Buildings. Additional accommodation so urgently needed for the Public Service has been procured by leasing the property known as 47 Queens Park for the use of the Railway and Municipal Board. This has released six large offices in the Parliament Buildings. The building on Spadina Crescent, formerly occupied by Knox College, has been leased for a term of ten years and will be occupied by the Department of Labour and Health and the Registrar General Branch for Registration of Vital Statistics.

Hospitals for Mental Diseases and Feeble Minded. The new Hospital at Whitby was the largest work under way during the fiscal year. A new horse barn was completed; four houses erected for mechanics and attendants; a building for acute patients for women was well advanced and preparation for a similar building for men patients is being made. Small additions and alterations were made at the Ontario Hospital Brockville, Hamilton, Kingston, London, Orillia and Penetanguishene.

Penal Institutions. Industrial Farm, Burwash—The extensive programme under way in the year 1919 was continued. The addition to Camp No. 1 was fully completed, also the guards' dormitory building, the central heating plant, the water supply system for fire protection and domestic service.

Educational Institutions. Extensive alterations were made to the Toronto Normal School, the remodelling of the Normal School, Ottawa, mentioned in the report of last year, was completed. A new building to replace the Main building at the Ontario School for the Deaf, Belleville, was under construction. The Main building, erected in 1870, was four stories in height and gave accommodation for class rooms on the lower floor and dormitories on the upper floors. Two modern dormitory buildings were erected in 1913. Many designs were prepared to alter the Main building, but after careful consideration, it was decided that the most satisfactory solution of the problem was the erection of a new building. After the expenditure of a large sum upon alterations to the old building, an unsatisfactory building would be the result.

Agricultural Buildings. Students' Residence at the Ontario Agricultural College, Guelph, also the main building for class rooms, and

Students' residence at the Agricultural College, Kemptville, which were in course of erection in 1919 from Federal grants to Aid in Agriculture, have been completed. The Apairy building at the Ontario Agricultural College, Guelph, has also been completed.

Administration of Justice. The work upon the court house at Sault Ste. Marie had reached the level of the ground floor when the contractor for the general work, D. Jannison & Son, failed to proceed, claiming that there had been a great advance in the cost of labour and materials after they had signed the contract, while they had anticipated a decrease. They represented that their capital and credit had become so impaired that they could not carry out the contract or proceed with the work. When the work had been at a standstill for several months, it was evident that the contractors could not proceed; the building was urgently needed, it was decided therefore to pay the contractors for the work they had done, modify the plans by making less expensive finish, and to advertise for new tenders.

Provincial Engineering Branch. This branch constructed 38 new reinforced concrete bridges, one steel bridge and 66 timber bridges, built a large new masonry dam at the outlet of Ahmic Lake on the Magnetawan River system of navigation. In addition to the above 66 timber bridges, 3 locks and 2 dams were repaired from the appropriation for Maintenance and Repairs of Locks, Dams, Bridging, etc. The locks near Huntsville, on the Muskoka River, between Mary and Fairy Lakes, were reconstructed in timber. Dredging operations were continued on the canal between Fairy and Peninsular Lakes. Ordinary repairs to the locks and dams and the placing of buoys were carried out on the Muskoka, Rosseau and Lake Joseph system of navigation.

The statement of the Accountant gives the expenditure of the Department in detail; the report of the Secretary and Law Clerk gives the several contracts entered into during the fiscal year ending October 31st, 1920.

I have the honour to be,

Sir,

Your obedient servant,

R. P. FAIRBAIRN,

Deputy Minister of Public Works.

REPORT OF ARCHITECT.

HONOURABLE F. C. BIGGS,

Minister of Public Works and Highways.

Sir,—I have the honour to submit my Annual Report for work done by the Architect's Branch of the Department of Public Works for year ending October 31st, 1920.

DEPARTMENTAL BUILDINGS.

Repairs have been made as found to be necessary to the Parliament Buildings, No. 5 Queen's Park, in which are located the Laboratories of the Provincial Board of Health and the Department of Mines; No. 15 Queen's Park, occupied by the Department of Labour, and No. 17 Queen's Park, used for offices in connection with the Forestry Branch of the Department of Lands, and No. 46 Richmond Street West, occupied by the Inspectors of Moving Pictures and staff, the Ontario License Commission and staff, Trades and Labour branches of the Department of Public Works. Furniture and furnishings have been supplied where found to be necessary.

The residence at No. 47 Queen's Park was purchased early in the season and is being fitted up to give accommodation to the Ontario Railway and Municipal Board, an addition has been erected in the rear to provide for a hearing room and a fireproof vault has been erected on the south side. Some minor alterations have been made to the interior of the building. The heating plant has been enlarged, sanitary plumbing installed and the whole building is being renovated and put in good order and will be ready for service in a few weeks' time. The stable in the rear is being converted into a garage, giving accommodation for storage of cars. The walks and grounds are being put in good order.

An addition is being built to the garage located in the rear of No. 5 Queen's Park, to be used as a repair shop, with adequate entrances from Surrey Place. This building will be completed in about three weeks. The work is being carried on under contract by Mr. T. V. Gearing.

Government House. The buildings generally have been kept in good repair, including the Residence, Lodge, Greenhouse, Garage, Stable and Cottages. The grounds, including the walks and drives, have been kept in good order.

Osgoode Hall. Repairs generally have been made to the buildings as required from time to time. A 2,000-gallon tank has been installed on the east side of the boiler house in connection with the oil fuel burning apparatus operating the steam heating boilers, which is working satisfactorily.

ONTARIO HOSPITALS.

Ontario Hospital, Brockville. The addition to the Dairy Barn and the erection of a milk-house in connection with same has been completed.

Ontario Hospital, Hamilton. Wiring and electric fixtures have been installed in the Superintendent's house and six of the employees' cottages. The work was done by our own men. The reservoir in connection with the water supply system was completed early in the year. Work on the Mortuary building is under way and should be completed at an early date.

Ontario Hospital, Kingston. The addition to the Nurses' Home was completed early in June. An important work has been commenced by our electricians in connection with the installation of a new system of lighting the roads and walks on the grounds of this institution, which will include the laying of conduit underground and pole lines overhead, by which the Hydro system will be connected with the institution to supply current for power and lighting.

Ontario Hospital, London. The large verandahs to both floors of the east wing of the main building were completed. The firehall and hose tower and new lavatories in Cottages A., B. and C. were also completed early in the year.

Ontario Hospital, Mimico. The work in connection with the installation of underground cables and concrete lamp standards to improve the lighting of grounds and main drive has been completed. This work was done by the staff of the Institution under the supervision of the Chief Electrician of this Department.

Ontario Hospital, Orillia. The Medical Superintendent's residence is nearly completed. The firehall and hose tower has also been completed. The addition built last year to the horse barn, recently partially destroyed by fire, is being rebuilt. Plans and specifications were prepared by Mr. E. M. Allen, of this Department, under instructions from Mr. Dallyn, for an activated sewage disposal plant located to the south of the main building. Tenders were called and the contract for building was awarded to the Ramsay Contracting Co., of Toronto. The machinery was purchased and installed by the Department. The work has been completed, the plant is in operation and working satisfactorily. Considerable work has been done in connection with the re-wiring and providing electric fixtures in the main building, the work being done by electricians of this Department, and will be continued and completed. The following electrical work has also been completed,—the installation of electric wiring in new stores and kitchen; and conduit installed for telephone and fire alarm system.

Ontario Hospital, Whitby. A large amount of work has been done at this Institution during the past year, the horse stable and implement shed and chicken houses were completed early in the year. The house for Farm Director, the two pairs of double cottages for mechanics and attendants, have also been completed and occupied for some time. Grading and levelling of grounds and laying of walks, roads has been continued and good progress has been made with this work. Weigh scales and milk-house have been erected convenient to the barn. Considerable electric light work has been done, including the laying of pole lines, the wiring of the recently erected dwelling houses, the barn, stables and other out-buildings, all of which was done by the Electricians of this Department. Plans were prepared for the Acute Patients' Hospital for females from particulars supplied by the Provincial Secretary's Department. Excavations for foundations of same were commenced in May. The walls have been carried up ready to receive the roof, which will be closed in before the end of the year. Considerable progress is also being made with the construction of the tunnel 1,200 ft. in length, leading from the power-house to this building, in which will be carried the heating and water pipes and electric wiring. Storm water drain and sewage drains from this building leading to the Lake and septic tank have been laid. Equipment has been supplied as required for the plant. Plans for Acute Patients' Hospital for Men have been prepared and excavations will be taken out for foundations of same before the end of the year.

Industrial Farm, Burwash. The Power Plant Building and equipment has been completed as far as needed at the present time, two additional heating boilers have been installed. The buildings erected this year include dwellings for the Doctor and the Farmer, double house for engineers. Other buildings nearing completion include extensive alterations to the Superintendent's residence, store and laundry building and the school-house. The sewage disposal plant is also nearing completion. All of the other buildings have been kept in good repair. A complete electric light system has been installed with generator and engine at Camp No. 1, conduit, wiring and fixtures have been installed in buildings completed this year, also the installation of two engine-driven generators with main switchboard in Power House. The work was done by our electricians under the supervision of the Chief Electrician of this Department.

Educational Buildings.

Repairs have been made as found to be necessary to the Normal and Model Schools, Toronto and Ottawa, the Normal Schools in Hamilton, Stratford and North Bay, and furniture supplied as required.

Normal School, Toronto. The large fireproof vaults in connection with the offices of the Ontario Workmen's Compensation Board have been finished. Several alterations have been made on the ground floor of this building, including the remodelling of the large lecture room, which has been divided into a class-room with a toilet-room for ladies, one of the old class-rooms has been converted and fitted up for a ladies' cloak room. Some of the class-rooms have been decorated. It is understood that considerable alterations will be made to this building next year.

Normal and Model School, Ottawa. The extensive alterations and remodelling of these buildings, which are fully described in my report of last year, were completed in November.

Ontario School for Deaf, Belleville. The foundations of the main building were completed about August first, and the drains in the interior and exterior of the building finished about the same time and the grading in connection with this contract was completed a month later. The walls will be carried up to the level of the first floor, which will be covered in and protected from the frost and closed down for the winter. Work will be resumed in the spring, as soon as weather permits. Contract for iron drains on inside of building was carried out by the John Lewis Co., of Belleville. Contract for cut stone work to floor level by the J. Witchall Co., of Toronto. The cottages for Engineer and workman have been completed. Proper attention has been given to repairs on the different buildings.

Ontario School for Blind, Brantford. Repairs have been made to the buildings as required.

Agricultural Buildings.

Ontario Agricultural College. The students' dormitory (Mill's Hall) was finished and completely furnished in time for the fall session. The Apiary Building was also finished and furnished in time for the opening. Preliminary sketches are being made for a building for a Veterinary College, which it is proposed to remove from Toronto to this Institution. Preliminary sketches are also being made for a new Dairy Building to take the place of the present building for this purpose, which is insufficient and out of date.

Agricultural School, Kemptville. The main building has been completed and is now in service. Plans and specifications were made for a Mechanics' Building, a contract for the erection of same was awarded to Robert Beggs, the building has been completed and is now being used.

Buildings in the District.

Repairs to the buildings in the Districts have received proper attention and furnishings supplied when necessary, including the Court Houses, Gaols and Registry Offices located in Algoma, Kenora, Manitoulin, Muskoka, Nipissing, Parry Sound, Rainy River, Sudbury, Temiskaming and Thunder Bay. Vault fittings and furniture for offices have been supplied where found to be necessary.

Court House, Sault Ste. Marie. The work on this building was stopped on the approach of severe weather, a temporary roof had been placed over the ground floor to protect the foundations from frost. Heat was also supplied by using Salamanders. In January we were notified by D. Jannison & Son that owing to labour conditions they were unable to carry out their contract and it was decided to let the work stand for a time to see if conditions would improve, in the meantime they are taking care of the building.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

F. R. Heakes,
Architect.

Toronto, October 31st, 1920.

REPORT OF ENGINEER.

HONOURABLE F. C. BIGGS,

Minister of Public Works and Highways.

SIR,—I have the honour to report on Public Works constructed, under the control of the Engineer's Branch of the Public Works Department, for the fiscal year ending Oct. 31st, 1920.

Continuing the practice of former years, all our work was carried out by the day labour system under our regular staff of foreman. Plans and specifications for the different works are prepared in the office by our Engineering Staff and supplied to the different foremen. Building material: Cement, steel and timber are purchased by tender through the office and delivered to the works; Engineers from the office lay out the work and direct the foremen from time to time as required. Each foreman is kept constantly employed during the construction season. Our work was delayed last season through the difficulty in securing the necessary cement and steel. Wages were abnormally high and the cost of our works greatly exceeded the cost of former years. The price of steel for truss bridges advanced to such an extent that it was decided not to erect any steel bridges during the year.

Our bridge work for the year comprised 38 reinforced concrete bridges, one steel span on masonry abutments and 66 timber bridges. The largest of the concrete bridges is a 60-foot arch over the Sauble River in North Bruce. The largest timber bridge is the Sharbot Lake Bridge in Addington.

Other large works: The Masonry Dam at the outlet of Ahmic Lake and the reconstruction of the Lock at Huntsville in timber. As the dredge foreman was in charge of the work on the Huntsville Lock, the dredging operations were late in starting. The work with the dredge continued on the channel between Fairy and Peninsula Lakes.

A new line of work started this season was the construction of a Fishway at the Au Sable River Dam at Rock Glen, in North Middlesex.

The expenditure for maintenance and repairs of Public Works was very heavy owing to the excessive cost of labor and material. The entire cost of the reconstruction of the Huntsville Lock was provided from this fund. The most important items of expenditure from this fund are as follows:

RECAPITULATION.

MAINTENANCE EXPENDITURE.

GENERAL.

Tools, repairs to equipment, etc.	$3,471 16	
Superintendent's Office and travelling expenses	540 54	
Superintendent's disbursements, freight, labor, etc.	508 69	
		$4,520 39

NAVIGATION.

Operation of Dredge	$5,846 32	
Clearing Streams—Placing buoys, etc.	731 02	
		$6,577 34

Repairs.

Port Carling Lock	$464 22	
Huntsville Lock	251 58	
Rebuilding Huntsville Lock	17,888 60	
Magnetawan Lock	481 70	
Operation and Repairs Norman Dam	707 48	
Bala Dam	385 66	
Port Sandfield	133 85	
Placing Boom at Moon Chute	140 28	
Operation of Store House	117 47	
		$20,570 84

Repairs to Bridges.

Rainy River District:		
Cameron Creek Bridge	$68 65	
Grassy River Bridge	164 50	
Locking Bridge	1,106 63	
		$1,339 78
Kenora District:		
Anderson Road Bridges	$441 08	
Con. 6 Bridge, Aubrey	81 96	
Eagle River Culverts	533 96	
East Channel Bridge, Kenora	3,378 43	
Gull River Culvert	132 23	
Lund Bridge	127 00	
Keewatin Town Bridge	79 01	
Pellatt Road Swing Bridge	554 38	
Southworth Bridges	404 81	
Wainwright Bridges	204 31	
		$5,937 17
Thunder Bay District:		
Gillus Bridge, Con. 6	$126 29	
		$126 29
Algoma District Bridges:		
Beaudoin Creek Bridge, Shakespeare	$150 50	
Black Creek Bridge, Victoria & Salter	363 63	
Bussineau Bridge	40 38	
Fourth Con. Bridge, Aberdeen	345 60	
Galbraith Bridge 3 and 4, 6th Con.	370 00	
Galbraith Bridge, Con. 6	315 93	
Iron Bridge, Mississagua	773 13	
Massey Bridge Approaches	1,298 92	
Montgomery Bridge	894 72	
Thessalon Bridge, Con. 1, Aberdeen	184 30	
Webbwood Bridge	2,628 61	
		$7,365 77
Sudbury District Bridges:		
Hagar Siding Bridge	$263 80	
Hammer T. L. Culvert	197 50	
Rapid River Bridge	340 40	
Vermillion Bridge, Morgan T. L.	693 05	
		$1,499 75
Manitoulin District:		
Brett Creek Bridge	$44 50	
Emery Creek Bridge, Gordon	87 50	
Navin Centre Bridge	3,769 87	
Scott Creek Bridge, Mills	200 90	
		$4,102 77

Sturgeon Falls District:		
Caldwell MacPherson T. L. Bridge	$72 00	
Fourth Con. Bridge waters	86 00	
Northwest Arm Bridge	1,482 85	
Pelland Bridge	237 95	
Rainville Bridge	175 60	
Sylvester Bridge	357 77	
		$2,462 17
Nipissing District:		
Depot Creek Bridge	$44 69	
		$44 69
Temiskaming District:		
Harley-Kerns Townhill Bridge	$125 25	
Hilliardton Bridge	57 14	
Pearson Bridge	166 00	
Tomstown Bridge	396 78	
White R. Bridges, repairs and protection	811 28	
Wabis Bridge, 4 and 5, Con. 5, Kerns	3,458 81	
		$5,015 26
Parry Sound District:		
Commanda Bridge	$49 80	
Galna Bridge, Centre Pier	2,382 78	
Orange Valley Bridge, Spence	254 10	
Westphalia Road Bridge	74 13	
Whitestone Bridge	28 45	
		$2,789 26
Muskoka District:		
Bala Dam Bridge	$42 00	
Baysville Bridge floor	462 87	
Big East Bridge	385 13	
Port Sydney Bridge	285 78	
Sharp's Creek Bridge, Draper	161 00	
		$1,336 78
North Victoria:		
Fishing grounds and Forks Bridge	$144 00	
Furnace Falls Bridge	15 05	
Farrell Creek Bridge, Cardiff	199 00	
		$358 05
North Hastings:		
Egan Creek Bridge	$394 80	
Farraday Bridge	306 04	
Parks Bridge, Limerick	261 25	
		$962 09
Renfrew District:		
Bells Rapids Bridge	$50 40	
Griffith Bridge approaches	872 70	
Latchford Bridge	99 07	
		$1,022 17

Lockmasters' Reports, 1920.

The movements of boats, scows and rafts of timber at the different locks were reported by the different Loockmasters as follows:

Magnetawan Lock—Steamboats, 821; small boats, 306; scows, 273; rafts, 318—1,718.

Huntsville Lock—Steamboats, 158; small boats, 609; scows, 105; rafts, 127—999.

Port Carling Lock—Steamboats, 5,531; small boats, 355; scows, 427; rafts, 185—6,498.

WORKS CONSTRUCTED UNDER SPECIAL APPROPRIATIONS.

Rainy River District Bridges.

Grassy River Bridge, 3rd Line, McCrosson.—This bridge is located over Grassy River on the road between Cons. 2 and 3 at Lot No. 1 in the Township of McCrosson. It is a Queen truss span 40 ft. long over the channel. Truss timbers, corbels and caps are sawn tamarac and pine, cover 3-in. tamarac plank. The approaches are properly graded. Cost of bridge complete, $1,585.51.

Fifth Line Bridge, Carpenter.—Two timber bridges located over creeks on the 5th Con. Road, Carpenter. The bridges are pile trestles 30 ft. long. Stringers sawn tamarac 8″ x 10″. Cover 3″ tamarac plank. Approaches well graded. Cost of bridge, $1,073.49.

Lavallee Bridge, 34-27 Devlin.—Located over Lavallee River on the road between sections 29 and 34 in Devlin. A pile trestle bridge 66 ft. long with a 36-foot centre span, supported by a King truss of sawn timber with a 3″ pine plank floor. Approaches well graded. Cost of bridge, $973.88.

Pine River Bridge, 6 and 7 Pattullo.—Located over Pine River on the road between sections 6 and 7 Pattullo. It is a pile trestle bridge 115 feet long, with a centre Queen truss span 40 feet long, truss timbers, caps, etc., 10″ x 10″ pine, stringers 8″ x 10″ pine, covering 3″ tamarac plank. Approaches well graded. Total cost, $1,574.43.

Second Line Bridge, Lot No. 1, Mather.—Located over the east branch of the Sturgeon River at Lot 1, on the Second Line of Mather. It is a pile trestle bridge 45 feet long, with 3″ tamarac plank floor. Approaches well graded. Total cost, $585.66.

Section 13 Bridge, Dobie Townline.—Located over the Sturgeon River east of Section 13, on the Townline between Shenston and Dobie. It is a pile trestle bridge 91 feet long with a centre truss span of 36 feet. Standard timber and cover. Approaches well graded and gravelled. Total cost, $927.60.

Side Line Bridge 8 and 9, Con. 3, Mather.—Located over the west branch of the Sturgeon River, on the 8th and 9th Sideline, Con. 3, Mather. A short timber bridge, 16 foot span. Pile abutments and pile wing walls, 3″ tamarac plank cover. Approaches graded, cost $295.37.

South Pine Bridge, Secs. 34 and 35, Morley.—Located over the south branch of Pine River, on the road between Sections 33 and 34, Morley. It is a pile trestle bridge 90 feet long. Standard pine and tamarac timber. Approaches well graded. Cost $889.61.

Sturgeon Bridge, 2 and 3, Shenston.—Located over the Sturgeon River on the trunk road between Sections 2 and 3, Shenston. The bridge is 110 feet long with a centre truss span 36 feet long. Standard timber. Approaches well graded and gravelled. Total cost, $1,637.85.

River Road Bridge, 48 Aylesworth.—Located over a creek on the River Road, Lot 48, Aylesworth. It is a pile trestle bridge 75 feet long with pile bents at 15 ft. centres. Standard timber; approaches well graded and gravelled. Cost, $805.25.

Third Line Bridge, Lot 8, Mather.—Located over the west branch of Sturgeon River at Lot 8, on the 3rd Line of Mather. 16-foot bridge with pile abutments and wing walls. Approaches well graded. Cost, $417.00.

Third Line Sturgeon Bridges at Lot 10 and 12, Kingsford.—Located over a creek at Lot 10 and 12 on the road in front of Con. 3, Kingsford. Two pile trestle bridges: at Lot 10 the bridge is 45 ft. long, and at Lot 12 the bridge is 39 ft. long. Approaches well graded. Cost, $972.69. The Rainy River bridges were all constructed under the direction of Frank Clement, Road Inspector. The timber was all secured during the preceding winter at a low price.

Kenora District Bridges.

Gould Road Bridge, Jaffray.—Located over a gulley at Lot 9 and 10, Con. 2, Jaffray. The bridge is a timber trestle 112 feet long, with framed bents at 16 foot centres. The bottom is rock and the posts rest on mud sills. The timber is all first class pine and tamarac. The bridge floor is 17 feet above the bottom of the gully. Cost, $1,982.50.

Ignace Bridge.—Located over the Marion Creek on West Street, in the municipality of Ignace. It is a timber bridge, 18 foot span, with approaches well graded. Cost, $423.62.

Meglund Bridges.—No. 1 located over Three Mile Creek at Lot 4, Con. 4, Meglund. A timber bridge with an 18 foot span. No. 2 located over Bear Creek, Lot 6, Con. 5, Meglund. A timber bridge, span 21 feet. Approaches well graded. Cost of two bridges, $397.91.

Mine Road Bridge, Van Horne.—Located over a creek on the Mining Road, Lot 9, Con. 2, Van Horne. The bridge has a 26 foot span. The stringers rest on timber crib abutments. The outside stringers are doubled. A needle beam is supported by heavy bolts through the double stringers. Cost, $211.25.

Richan Road Bridge and Culvert, Wainwright.—A timber bridge with a 16 foot span was constructed over a creek at Lots 2 and 3, Con. 4, Wainwright. A new top was also placed on a small bridge at the same location. Cost of work, $487.11.

Redditt Bridge.—Located over Black River in the Town of Redditt, on the G. T. P. Ry. It is a timber bridge 88 feet long resting on four stone-filled timber cribs. It has a centre span 30 feet clear with a King truss and two cud spans of 15 feet each. The timber cribs are 8 feet wide and 16 feet long. The approaches are well graded and a strong guard rail placed on each side of bridge and fill. Cost, $1,792.75.

Wabigoon Bridge.—Located over the Wabigoon River at the Falls at Lot 7, Con. 2, Wainwright. It is a timber bridge with a clear span of 44 feet. A Queen truss supports the floor. New tops were placed on the old timber abutments. The bridge was entirely renewed. The approaches were properly graded and strong guard rails placed on each side of bridge and fill. Total cost, $1,387.16.

Thunder Bay District.

Arnold Creek Bridge.—Located over Arnold Creek on the 2nd and 3rd Sideline, Con. 1, Conmee. A timber bridge 12 feet long. Approaches filled and widened and hills cut down on each side to ease approaches. Cost, $341.71.

Dona Bridge, Dog River.—Located over the Dog River at Dona Station, on the G. T. P. Ry., a short distance north of the Dawson trail. It is a timber bridge 140 feet long on stone-filled timber cribs. The cribs are 6 ft. wide, 16 ft. long, and from 6 to 8 ft. high. The centre span is 56 feet long and each of the end spans 30 feet long. The truss timbers, needle beams and corbels are 10″ x 12″. Stringers 8″ flatted cedar, floor 3″ pine plank. Approaches well graded and riprapped on up-stream side to high-water level. Total cost, $3,286.27.

Pine River Bridge, Pearson.—Located over Pine River between Lots 22 and 23, Con. 1, Pearson. A pile trestle bridge 67 feet long with four spans 16 feet clear. Live lines of 8″ flatted stringers carry a 3″ plank floor, guard rail on each side of bridge and fill. The approaches are well graded. Cost, $500.84. John McNee, Road Inspector, was in charge of all the work in this District.

Sault Ste. Marie District.

Bedard Bridge.—A concrete culvert 50 feet long, 7 feet wide and 5 feet high, inside measurement, was constructed on the road between Sections 22 and 27 in the Township of Korah, to replace a long high timber bridge. The culvert rests on a pile foundation. The ravine is filled to a height of 17 feet above the bottom of the gully. Strong guard rail placed on each side of fill. S. W. Butt was foreman in charge. Cost complete, $2,982.39.

Section 10 Bridge, Tarentorus.—Located over Silver Creek at the southwest corner of Section 10, in Tarentorus. A concrete culvert 50 feet long, 6 feet wide and 5 feet high, inside measurement. The culvert replaces a long timber bridge. The fill extends to a height of 8 feet above top of culvert. Strong guard rails in place. Cost, $1,800.00. S. W. Butt was foreman in charge.

Algoma District.

Bar River Bridge, Trunk Road.—Located over Bar River on the Trunk Road between Sections 3 and 4, in the Township of Laird. It is a concrete

trestle bridge 70 feet long on concrete piles. The bottom is very soft. The centre span is 25 feet wide and each of the two outside spans is 20 feet wide. The roadway is 16 feet in clear width. The deck is carried on four bents of concrete piles; each of the two centre bents has seven piles 30 feet long. The piles are each reinforced with four ¾" square bars wound with No. 7 annealed wire. Concrete caps 18" wide and 2½ ft. high are built up from the head of the piles. The reinforcing bars in the piles extend 12 inches into these caps. Four lines of concrete beams 12 inches wide and 24 inches deep carry a 6-inch floor slab reinforced with ⅝ bars. The beams are reinforced with 1-inch square bars 5 in each centre beam and 4 in each outside beam. The railing consists of moulded concrete posts bedded in the top of the outside beams and also set in the top rail. The top rail, 6" x 12", is supported by eight main posts on each side of bridge. The main posts are reinforced with ⅝" bars. This bridge complete cost $4,500.00. S. W. Butt was foreman in charge.

Massey Bridge, Spanish River.—This work consisted of placing a new floor on the bridge over the Spanish River. Constructed in 1907. The timber floor 650 feet long was entirely renewed. The timber sheeting at the north end approach had rotted away, allowing the fill to fall away. The steel posts at the north end of the bridge were encased in concrete. The fill was allowed to fall to a natural slope. The toe of the slope was built of heavy stone to protect it from the water. The north approach, 140 feet long, was repaired and well riprapped on each side. Walter Robinson was foreman in charge. The total cost of the repairs was $3,738.00.

Nesterville Bridge.—Located over a creek in the village of Nesterville on the Trunk Road. A standard concrete beam bridge with a clear span of 20 feet and roadway 16 feet in clear width. The bridge site was changed from the old location to straighten the road. The abutments rest on pile foundations. The approaches were well graded and gravelled. Walter Robinson was foreman in charge. Cost of bridge, $2,319.75.

Pickerel Creek Bridge, Con. 6, Bright.—Located over Pickerel Creek at Lot 10, in the 6th Concession of Bright. A standard concrete beam bridge with a clear span of 15 feet, and 14 feet clear roadway. Walter Robinson foreman in charge, cost $1,593.43.

Potomac Bridge, Cobden.—Located over the Potomac River in Cobden. It is locally known as McGregor's Bridge. A pile trestle bridge 100 feet long. It has a centre truss span 30 feet long resting on double pile piers 5 feet wide. It has two 16-foot spans at each end of the truss span. As the bridge covers the entire stream the approaches are light. Jas. Barkley, Inspector, directed the work. Cost of bridge complete, $1,419.00.

Serpent River Bridge, Trunk Road.—Located over the Serpent River on the new section of the Trunk Road east of Spragge, in the Township of Lewis. A steel truss bridge 80 feet long, 16 feet roadway on concrete abutments. The abutments were built by Sam Cole, foreman. The steel span was supplied by the Hamilton Bridge Works Co. at a cost of $3,016.00. The steel was erected and painted, and the concrete floor placed by S. W. Butt, foreman. Total cost of bridge, $5,539.62.

Shewfeldt Creek Bridge, Trunk Road, Laird.—Located over Shewfeldt Creek on the Trunk Road between Sections 32 and 33, Laird. It is a standard concrete beam bridge with a clear span of 20 feet, and roadway 14 feet in clear width. Concrete abutments rest on pile foundations. The abutments are 10 feet in height to the floor level. The approaches required a heavy fill at each end of the bridge. S. W. Butt was foreman in charge. Cost of bridge, $1,800.00.

St. Joseph Island Bridges, Con. 1.—Duncan Creek Bridge is of concrete with a clear span of 10 feet, replacing a long wooden bridge. Concrete abutments 6 feet high. Concrete floor 12 inches thick reinforced with 6 lines of 60 lb. railway steel. Concrete railing 3 feet in height. Stone fill at west end 60 feet long, 4 feet high and 20 feet wide, also stone fill at east end 100 feet long, 2½ feet high and 20 feet wide.

McDonald Culvert.—A concrete arch culvert 4 feet wide and 4 feet high on pile foundation, 135 piles were used as the bottom is very soft. The culvert is 18 feet long. The fill on the west is 35 feet long and 4 feet high. On the east 135 feet long, height from 1 to 2 feet. James Barkley directed the work. Cost of both culverts, $977.70.

Withers Bridge, Victoria.—Located over a creek at Section 26, Victoria. The abutments are of rubble masonry. The old bridge was 28 feet long. The new bridge has a clear span of 16 feet, five lines of flatted cedar stringers carry a 5″ floor of flatted cedar. The approaches are filled with earth and stone, 145 cubic yards of material being used for the fill. Strong guard rail on bridge and fill. Cost of work $800.00. James Barkley directed the work.

Manitoulin District.

Black Creek Bridges, Lorne.—Two timber bridges over Black Creek, at Lot 4, Concession 5, Lorne. One bridge has a clear span of 18 feet and the other a span of 22 feet. The abutments are of flatted cedar well drift bolted, and are filled with stone. Five lines of flatted cedar stringers carry a 3″ plank floor. The approaches are well graded.

Blue Jay Creek Bridge.—Located over Blue Jay Creek at Lot 29, Con. "B," Tehkummah. A timber deck bridge on concrete abutments. It has a clear span of 22 feet supported by a King truss. The ravine is filled with stone top dressed with earth and gravel. Cost, $1,584.00.

Brett Creek Bridge.—Located over Brett Creek at Lot 16, Con. 7, Allan. A timber deck bridge on concrete abutments. It has a clear span of 10 feet. Approaches well graded.

Mud Creek Bridge.—Located over Mud Creek at Lot 25, Concession 7, Billings. A timber bridge with a clear span of 20 feet. The abutments are cedar cribs stone filled. Five lines of flatted cedar stringers carry a 3″ plank floor. Approaches properly graded, cost $695.49.

Tekummah Bridge.—Located over Blue Jay Creek at Lot 11, Concession 6, Tekummah. A timber bridge with a clear span of 16 feet. Cedar abutments stone filled. The approaches are filled with stone and top dressed with gravel. Cost $349.10.

J. E. Vanmeer, Road Inspector, directed the work in connection with the bridges in the Manitoulin District.

Sturgeon Falls District.

Cache Creek Bridges.—Located over Cache Creek at Lots 10 and 14 on the road in front of Concession 2, Springer. These two bridges are standard concrete beam structures with clear spans of 25 feet each. The abutments rest on pile foundations. The 6-inch floor slab is reinforced with ⅝" steel bars, and is carried by 4 main beams 12" wide and 24" deep, the outside beams are reinforced with 4 square twisted 1" bars, while the centre beams are reinforced with 5 bars. The railing is of moulded concrete posts. The approaches are well graded and faced with stone on the up-stream side. Total cost of the two bridges, $5,748.23.

Rainville Bridge.—Located over a creek on the Townline between Caldwell and McPherson, opposite Concession 4. A timber bridge with a clear span of 15 feet on timber crib abutments stone filled. Stringers and floor flatted cedar. Approaches well graded. Cost of work, $366.30.

Southern Bridge, Sturgeon Falls.—Located over the Sturgeon River near the C. P. Ry. When the new highway bridge was built at the Falls in the town a long pin-connected span was replaced with heavier steel. Last year the town of Sturgeon Falls petitioned to have this light steel erected for a new crossing adjoining the C. P. Ry. This span is 130 feet long with a roadway 16 feet wide. The abutments are of rubble masonry set in cement mortar. The abutments are 8½ feet thick at the base, and 18 feet in height. They were constructed under the direction of A. L. McDonald, Public Works Foreman. The steel was erected by C. R. Dolmage, Public Works Foreman. The steel was thoroughly overhauled before erection, nearly all the old pins for connections were discarded and new pins secured. The floor is 3" Pine Plank. The approaches were built up of stone secured at the site. The bridge is not supposed to accommodate heavy traffic, which is provided for by the new bridge at the Falls, a short distance up-stream. Total cost of work and repairs, $5,748.00.

Temiskaming District.

Baptiste Creek Bridge, Lot 6, Henwood Townline.—Located over Jean Baptiste Creek at Lot 6 on the Townline between Henwood and Beauchamp. A pile trestle bridge 82 feet long with a centre truss span of 40 feet. The truss rests on double pile piers 6 feet wide, approach spans of 15 feet are placed at each end of the truss extending well on to the bank so that no fill is required. The truss timbers, corbils, caps, etc., are of 10" x 12" sawn pine, cover 3" pine plank, and stringers 10" flatted pine and cedar. D. H. McIntosh was foreman in charge. Cost of bridge, $1,441.00.

Dixon Creek Bridge.—Located over Dixon Creek on the Haileybury-Liskeard Road. It is a standard concrete beam bridge with a clear span of 15 feet and roadway 16 feet wide. The four floor beams are 12 inches wide and 16 inches deep reinforced with 4 twisted bars 1 inch square, the 6-inch floor slab is reinforced with ⅝" bars, grading well finished. J. W. Davis was foreman in charge. Cost of bridge, $1,876.00.

Work was started on culverts on the North Road and the Harley Casey Townline, but was discontinued when cold weather set in.

Nipissing District.

Bastien Bridge.—Located over Bastien Creek on the Mattawa-Pembroke Road, Lot 25, Cameron. It is a standard concrete beam bridge with a clear span of 20 feet and 14-foot roadway. The abutments are concrete on good foundations with height to floor level 10 feet. The approaches are well graded. J. W. Davis was foreman in charge. Cost $1,939.00.

Blue Sea Bridge, Con. 1, Bonfield.—Located over Blue Sea Creek, Con. 1, Bonfield. It is a timber bridge with a clear span of 22 feet resting on stone filled crib abutments 5 feet high. The approaches well filled with clay and stone. Cost, $497.52.

Blue Sea Bridge, Con. 10, Boulter.—Located over the Blue Sea Creek, Con. 10, Boulter. It is a timber deck bridge on rubble masonry abutments. The abutments are 12 feet high, built of rubble masonry set in cement mortar. It has a clear span of 15 feet, stringers flatted cedar, 3" plank floor, railing over bridge and fill. The fill on the north end of bridge is 60 feet long and from 1 to 12 feet high, on the south end the fill is 80 feet long and from 1 to 12 feet in height. Cost of bridge and fill, $1,116.00.

Chippewa Creek Bridge, Widdifield.—Located over Chippewa Creek on O'Brien Street, near the town of North Bay. It is a standard concrete beam bridge with a clear span of 20 feet, roadway 14 feet in clear width. The abutments rest on hard-pan gravel and are 11 feet in height to the floor level. The approaches are well graded. J. W. Davis was foreman in charge. Cost of work, $1,750.00.

Boulter Townline Bridge.—Located over a creek on the Boulter-Bonfield Townline. It is a timber bridge on stone-filled crib abutments. It has a clear span of 20 feet supported by a King truss. A heavy fill was placed at each end of the bridge. Strong guard rails placed on each side of bridge and fill. Cost of bridge, $424.00.

Sparks Creek Bridge, Con. 5, Bonfield.—Located over Sparks Creek at Lots 25 and 26, Con. 5, Bonfield. A timber bridge on stone-filled crib abutments 6 feet in height. It has a clear span of 19 feet supported by a King truss. The approaches were filled over a length of 325 feet from 1 to 6 feet in height. A strong guard rail was placed over the bridge and the heavy fill. Total cost, $506.00.

Swamp Creek Bridge, Con. 12, Boulter.—Located over a creek at Lots 33 and 34, Con. 12, Boulter. A timber bridge on stone-filled timber cribs. The bridge has a clear span of 16 feet, approaches well graded. Cost, $795.00.

Parry Sound District.

Blackwater Bridge, Con. 12, Christie.—Located over Blackwater Creek, at Lot 18, Con. 12, Christie. The bridge has a 12-foot span and replaces a long timber bridge. The abutments are rubble masonry set in cement mortar. The floor and stringers are of flatted cedar. Strong guard rail in place. The old ravine was filled over a length of 82 feet with a depth from 1 to 6 feet to provide approaches; a rock ledge 7 feet long, 12 feet wide and 18 inches deep was blasted from the bottom of the creek. John Orr, Road Inspector, directed the work. Cost of bridge, $892.00.

Distress Bridge, Magnetawan.—Located over the Distress River at Magnetawan Village on the Burk's Falls Road. The bridge is a concrete trestle 76 feet long on 4 bents of concrete piles. The bridge has 3 spans, the centre one 30 feet, and each end span 20 feet in the clear. The piles in the centre bents are 30 feet long and in the end bents 20 feet long. Four main beams carry a 6-inch concrete floor, the floor beams are reinforced with 1-inch square twisted bars and the floor is reinforced with ⅝" bars. The railing is of moulded concrete posts supported by a top rail 8" x 12". The approaches are well graded, a stone fill is allowed to fall to a natural slope around the end piles, taking the place of a solid abutment. Heavy fills are required at each end as the approaches overflow in high water. T. J. Paget was foreman in charge. Total cost of bridge, $4,627.91.

Dufferin Creek Bridge, Spence.—Located over Dufferin Creek on the Nipissing Road in Spence. A standard concrete beam bridge with a clear span of 12 feet. The bottom is very bad, necessitating the use of long heavy piles. John Orr directed the work. Cost, $2,177.00.

Hurdville Bridge, McKellar.—Located over the Seguin River at Hurdville, in the 4th Con. of McKellar, adjoining the west boundary. It is a combination bridge and dam. There is an old timber dam at this point that controls the level of Manitouwabing Lake. A new bridge had to be provided. It was found that a serviceable dam could be provided by extending the bridge piers about 11 feet beyond the ordinary length. A mill at this point is served with a raceway and log flume. A timber trestle 38 feet long was provided over the flume and raceway. The bridge and dam comprises two openings 20 feet in clear width. Three piers 4 feet wide, 28 feet long, and 9 feet high were constructed of rubble masonry set in cement mortar, steel faced chaces were provided for the stop logs. The deck for the bridge will consist of a 6-inch floor slab supported by 4 main beams of concrete, reinforced with 1-inch square bars. The railing will consist of moulded concrete posts with top rail and main posts well reinforced. The north approach to the bridge, about 40 feet long, is filled with earth, and is provided with a core wall of masonry 18 inches thick to render it water tight. T. J. Paget was foreman in charge. Total cost, $5,175.00.

Lount Distress Bridge.—Located over the Distress River at Lot 2, Concession 2, Lount. The old bridge was provided with stone abutments but was too low. The deck was removed and the abutments built up 26 inches higher with stone in cement mortar. Two new stringers were provided; with this exception the old cover was replaced. The approaches were built up with earth and stone to meet the new floor level. John Orr, Road Inspector, directed the work, which cost $237.00.

Seguin Bridge, McDougall.—Located over the Seguin River at Lot 9, Concession 5, on the McDougall Road. The bridge is a 3-span concrete trestle on concrete piles, with an over all length of 108 feet. It has a centre span 40 feet clear. A 6-inch floor span is carried on four main beams, on the centre span the beams are 12 inches wide and 40 inches deep, reinforced with 6 bars 1 inch square; the beams on the 30-foot spans are 30 inches deep, each reinforced with 5 bars 1 inch square. The floor is reinforced with $\frac{5}{8}$" bars. The piles are reinforced with $\frac{3}{4}$" bars, wound with No. 7 annealed wire. The railing is of moulded concrete posts with a 6" x 12" top rail reinforced with $\frac{5}{8}$" bars, the top rail is supported by 12 main posts 12 inches square reinforced with $\frac{5}{8}$" bars. The fill at each end is allowed to fall to a natural slope around the end piles. The face of the fill is heavily faced with stone to protect it from the river current. The grade at the south end of the bridge extends over 300 feet and varies in height from 2 to 8 feet. A hill at the south end was reduced to ease the grade. On the north end the cut and fill extends over 400 feet, but is not so heavy as on the south end. The entire cost of bridge and fill was $10,091.58. The work was commenced in 1919 by C. L. Falstrem and completed in 1920 by T. J. Paget, F.P.W.

Muskoka District.

Birkendale Bridges.—Located over a creek near Birkendale, on the Huntsville-Dorset Road, Lot 7, Con. 6, Frankline. A timber bridge with a clear span of 14 feet. Cost, $234.30.

Johnston Creek Bridge, Oakley.—Located over Johnston Creek at Lots 22 and 23, on the south Townline of Oakley. A timber bridge with a 20-foot span. Cost, $292.80.

Long Bridge, Stisted.—Located over Black Creek, on the 10th and 11th Sideroad, Concession 8, Stisted. This bridge is a long pile trestle. An entirely new deck, stringers, floor and railing was placed on the bridge. Cost, $684.93.

Lot 9 Bridge, Concession 10, Ryde.—Located over a creek at Lot 9, Concession 10, Ryde. The bridge was moved 50 feet down stream from the old site to straighten the road. It is constructed with rubble masonry abutments 15 feet in height and cement mortar. The abutments rest on rock bottom. The floor is a flat slab 12 inches thick, well reinforced. The grade to provide a new road across the ravine was very heavy. The bridge has a clear span of 10 feet. Cost, $1,773.62.

Monck Bridge, River Road.—Located over a creek at Lot 6, Concession 1, Monck, on the Muskoka River Road. It is a standard concrete beam bridge with a clear span of 20 feet. The approaches are well graded. Cost, $1,567.55.

Robinson Creek Bridge.—Located over Robertson Creek at Norway Point, near the Wawa Hotel, in the Township of Ridout. It is a concrete bridge with a clear span of 12 feet. The floor is a 12-inch slab well reinforced. Cost, $880.82.

Slatter's Creek Bridge.—Located on the Huntsville-Dorset Road, Lot 14, Concession 13, Brunell. The bridge has a clear span of 10 feet. It is built with rubble masonry abutments with a timber floor, strong railing provided. Approaches well graded. Cost, $272.00.

Ufford Road Bridge, Watt.—Located over a creek on the Ufford Road at Lot 13, Concession 4, Watt. It is a standard concrete beam bridge with a clear span of 20 feet, approaches well graded. Cost, $1,633.36.

Wm. Lowe, Public Works Foreman, had charge of all the bridge work in the Muskoka District.

Simcoe County.

Black Creek Bridge, Vespra.—Located over Black Creek at Lot 10, on road between Concessions 9 and 10, Vespra. It is a concrete beam bridge on concrete pile abutments and has a clear span of 25 feet. The concrete piles are 24 feet long reinforced with four ¾" square twisted bars wound with No. 7 annealed wire. A 6-inch floor slab is carried by 4 main beams 12 inches wide and 24 inches deep. The beams are reinforced with five 1 inch square twisted bars. Concrete post railing. A stone fill at each end of the bridge holds the earth fill that forms the approaches. Cost complete, $1,780.00.

Hog Creek Bridge, Tay.—Located over Hog Creek at Lot 6, on the road in front of Concession 5 of Tay. It is a concrete beam bridge with a clear span of 20 feet on concrete pile abutments. The piles are reinforced with ¾" square bars, and the beams are reinforced with 1" square bars. Concrete post railing. Each end filled with stone to hold the approach fills. Cost, $1,650.46.

Willow Creek Bridge, Vespra.—Located over Willow Creek at Lot 12, on the 8th Line of Vespra. It is a concrete beam bridge on concrete pile abutments and has a clear span of 37 feet. The concrete piles are 22 feet long, reinforced with 4¾" bars. A 6-inch floor slab is carried by 4 main beams. The two centre beams are 14 inches wide, 36 inches deep, reinforced with seven 1 inch square twisted bars. The outside beams are 12 inches wide and 48 inches deep, reinforced with five 1 inch square bars. Concrete post railing. A stone fill at each end holds the approach fill. Cost complete, $2,143.55.

Wye River Bridge, Tiny.—It is a concrete beam bridge with a clear span of 30 feet on concrete abutments. The abutments rest on pile foundations; the structure is well reinforced throughout, with square twisted bars; the approaches are properly graded. Cost, $2,725.19.

Amos Train, Public Works Foreman, was in charge of all the work in Simcoe.

Grey County.

Bighead River Bridge, Sydenham.—Located over the Bighead River, on the road between the first and second Concessions of Sydenham. It is a concrete beam bridge with two spans of 25 feet each. The bridge is built

on a skew to accommodate the flow of water. The abutments and centre pier are mass concrete resting on a good gravel bottom. A 6-inch floor slab is carried by 4 main beams, 12 inches wide and 27 inches deep, reinforced with five 1 inch square twisted bars. The floor is reinforced with $\frac{5}{8}$" bars. The railing is of moulded concrete posts supported by a reinforced top rail 6" x 12". The top rail is supported by 7 main posts on each side of the bridge. The main posts are reinforced with $\frac{5}{8}$" bars. The approaches are well graded. The work was started in the fall of 1919, and completed early last spring. S. Cole was foreman in charge. Cost, $4,138.77.

Bothwell Creek Bridge.—Located over Bothwell Creek on the sideroad between Lots 24 and 25, Concession 10, Sydenham. A standard concrete beam bridge with a clear span of 27 feet. The abutments are of concrete and rest on pile foundations. The 6-inch floor slab is supported by 4 main beams, 14 inches wide and 30 inches deep. The two middle beams are reinforced with seven 1 inch square twisted bars. The two outside beams are reinforced with five 1 inch square twisted bars. Standard moulded concrete post railing. Approaches well graded. S. Cole was foreman in charge. Cost, $2,670.25.

Gleason Bridge, Concession 23, Keppel.—A standard concrete beam bridge with a clear span of 20 feet. Concrete abutments rest on a good gravel foundation. Approaches well graded. S. Cole foreman in charge. Cost, $1,728.90.

Keppel Bridge, Indian River.—Located over the Indian River at Lot 33, on the road in front of Concession 16, Keppel. It is a concrete beam bridge with 2 spans of 25 feet clear width. The abutments and centre pier are of concrete resting on a hard pan bottom. The approaches are well graded. Amos Train was foreman in charge. Cost, $2,984.09.

Linton Line Bridge.—Located over Indian River on the sideroad between Lots 27 and 28 in the Rear Concession of Sarawak. It is a standard concrete beam bridge with a clear span of 37 feet. The concrete abutments rest on a hardpan bottom. The abutments are built on a skew in line with the stream. Approaches well graded. S. Cole was foreman in charge. Cost, $2,726.75.

Victoria and Haliburton.

Kushog Lake Bridge.—Located over the middle branch of Burnt River at the outlet of Kushog Lake, Lot 15, Concession 14, Snowdon. It is a concrete beam bridge. The east span is 17 feet 8 inches clear, the middle span 14 feet, and the west span 16 feet clear. The bridge is immediately below the Government dam and the bridge piers are a continuation of the piers of the dam. A 6-inch floor slab is carried by 4 beams 12 inches wide and 18 inches deep, reinforced with 1 inch square twisted bars. The railing is a standard rail of moulded concrete posts. The approaches are well graded. P. R. Switzer was foreman in charge. Cost of bridge, $3,078.62.

Middle Branch Bridge.—Located over the Middle Branch of Burnt River at Lot 15, on the road in front of Concession 14, Snowdon. It is a standard concrete beam bridge with a clear span of 31 feet 10 inches on

concrete abutments. The abutments rest on rock bottom and are 11 feet in height to the floor level. A 6-inch floor slab is supported by 4 main beams 14 inches wide and 30 inches deep, reinforced with six 1 inch square twisted bars. The floor is reinforced with ⅝" bars. The railing is of moulded concrete posts. The approaches are well graded. P. R. Switzer was foreman in charge. Cost of bridge, $1,518.42.

Seventh Concession Bridge, Fenelon.—This is a concrete bridge locally known as Shier's Bridge, in the Township of Fenelon. It is a concrete bridge with a clear span of 30 feet. It was constructed by the Township of Fenelon at a cost of $1,847.10. At the last session of the Legislature a grant of $600.00 was voted for this bridge. The bridge was examined by Wm. Kennedy, Superintendent of Public Works, who reported the work completed in a workman like manner. On report the grant of $600.00 was paid to the Township of Fenelon.

North Hastings District.

Bird's Creek Bridge, Herschell.—Located over Bird's Creek at Lot 12, Concession 3, Herschell. A new timber bridge 32 feet long with a clear span of 20 feet. It rests on timber cribs stone filled. The approaches are well graded and strong guard rails placed on each side of bridge and fill. Cost, $314.35.

Egan Creek Bridge, Dungannon.—A timber bridge located over Egan Creek at Lot 10, Concession 10, Dungannon. The bridge has a clear span of 35 feet. The abutments are timber cribs well drift bolted and stone filled. A Queen truss of 10" x 12" timbers supports the floor. A long, heavy fill was constructed as an approach. The fill is faced with stone on each side up to high water level. Cost, $1,618.84.

Gilroy Creek Bridge, Wollaston.—A timber bridge with a clear span of 20 feet, located over Gilroy Creek at Lot 19, Concession 14, Wollaston. The abutments are timber cribs stone filled. The approaches are well graded. Cost, $485.43.

Thompson Creek Bridge, Monteagle.—Located over Thompson Creek at Lot 9, Concession 5, Monteagle. A timber bridge with a clear span of 20 feet. Timber crib abutments, stone filled, approaches well graded. Cost, $280.00.

Walter Wiggins, Road Inspector, directed the construction of the North Hastings bridges.

Addington District.

Clyde River Bridge.—Located over the Clyde River near Folger Station, in the Township of Lavant. The bridge has a clear span of 16 feet on stone abutments 5 feet high, 16 feet long and 8 feet wide. On the west the approach fill is 100 feet long and 5 feet high. On the east end the fill of stone is 16 feet long and 7 feet high. A strong railing 136 feet long is placed on each side of bridge and fill. The hills on each side were cut down to ease the grades. Cost, $400.00.

Elm Tree Bridge, Kennebec.—Located over Otter Creek on the Kennebec-Kaladar boundary opposite Lot 9, in the 1st Concession of Kennebec. The old timber bridge was 60 feet long. It is replaced with a timber bridge with a 12-foot span on timber piers stone filled. The hills on each side were cut down to ease the grades and provide material for filling the approaches. Strong guard rails are placed on each side of bridge and fill. Cost, $598.12.

Haddock Bridge, Hinchinbrooke.—Located over a creek on the Haddock-Parham Road. A concrete bridge with a 10-foot span. The bridge was not completed through lack of cement. Cost to date, $524.26.

Sharbot Lake Bridge.—Located over the Narrows of Sharbot Lake adjoining the C. P. Railway in the Township of Oso. It is a timber trestle bridge 512 feet long with roadway 14 feet in clear width. At the south end of the old float bridge that formerly provided for the traffic a steel span was placed over a 24-foot opening to provide a passage for motor boats; this steel span was moved north to line in with the C. P. Railway bridge and the former opening was filled with stone. The overall length of bridge is now 572 feet. On the central section of the bridge, 240 feet, the piles are 55 feet long, while at each end of the bridge the piles are from 25 to 45 feet long. Pile bents with 5 piles to each bent are driven at 16 foot centres; the greater number of the long piles are spliced; all the bents are well cross braced. The stringers are 8-inch flatted cedar and pine drift bolted to the caps. The floor is of 3-inch pine plank creosoted and painted with a heavy floor pitch. A substantial guard rail is placed on each side of bridge and fill. The approaches are well graded and the bridge throughout is finished in a workmanlike manner. C. R. Dolmage was foreman in charge. The entire cost was $11,389.00, of which amount the county contributed $3,200.00.

Tryon Road Bridge, Olden.—Located over a creek near Elbow Lake, Concession 7, Olden. It is a timber bridge with a 16-foot span on timber crib abutments; approaches well graded. Cost, $400.00.

All the work in the Addington District was done under the direction of W. W. Pringle, Road Inspector.

Renfrew District.

Hurd Creek Bridge.—Located over Hurd Creek, in the north-east part of the Township of Sebastopol. It is a timber bridge of two spans of 15 feet each. The abutments and centre pier are stone-filled cribs well drift bolted. The approaches are filled with rock, top dressed with gravel. Cost, $500.00.

Kilby Bridge.—Located over Cochrane Creek on the road north of Golden Lake, Lot 12, Concession 5, North Algoma. It is a standard concrete beam bridge with a clear span of 15 feet. The abutments rest on pile foundations. The approaches are well filled with stone and gravel. Cost, $2,803.66.

Sandy Creek Bridge.—Located over Sandy Creek at Lot 15, Concession 12, Sebastopol. It is a timber bridge with a clear span of 16 feet on cedar crib abutments stone filled. The approaches are well filled with stone and

gravel, and strong guard rails placed on each side of bridge and fill. Cost, $500.00.

The work in Renfrew was done under the direction of J. H. Zummach, Road Inspector.

GENERAL WORK.

Ahmic Dam and Bridge.—Located on Magnetawan River at the outlet of Ahmic Lake, at Lot 14, on the road between Concessions 8 and 9 of Croft. The highway bridge at this point, a short distance north of the old dam, was gone beyond repair; the old timber dam was also beyond repair and in a very dangerous condition; on investigation it was determined that a combined bridge and dam could be constructed at less cost than could two independent structures; plans were prepared accordingly. At the close of navigation in 1919, T. J. Paget, Public Works foreman, was placed in charge of the work. The piers were completed in time to take care of the spring flood in 1920, and the bridge was opened for traffic in June, 1920. The structure comprises 4 sluiceways, each of 20 feet in clear width, with provision made for a 5th sluice of 15 feet for power development if such is desired by the owner of the property; this sluice accommodates a fishway, which has been constructed. The sub-structure is all of rubble masonry set in cement mortar. Six piers 5 feet wide and 29 feet long are provided, ranging in height from 12 to 16 feet. The stop-log sills are placed 2 feet below the level of the sills in the old dam.

Standard navigation level in Ahmic Lake is fixed at 5 feet above the level of the sills in the new dam. The stop-log chaces are 8 inches deep and 14 inches wide and are lined with steel plates. Emergency chaces are also provided. The platform over the dam is covered with 3-inch pine plank supported by 4 lines of 10-inch steel I-beams. The bridge floor consists of an 8-inch concrete slab, reinforced with $\frac{5}{8}$″ bars, supported by 4 lines of concrete beams. The beams, 12 inches wide and 18 inches deep, reinforced with 1 inch square twisted bars. A railing of moulded concrete posts is placed on each side of the bridge. The approaches at each end are faced on the up-stream side with a masonry wall, on the lower side wing walls are provided to hold the fill. A short section of new road was opened up at each end of the bridge. The fishway provided follows the standard plan adopted by the Fishery Department. The full cost of bridge and dam, $18,316.00.

Rock Glen Fishway.—Located at the Rock Glen Power Dam near Arkona, on the Au Sable River, the boundary between West Williams and Bosanquet. This is a solid concrete dam 10 feet high, provided with flash boards to regulate the flow and control the level of the stream. This Fishway was undertaken at the instance of the Fishery Department to provide for the passage of Fish from the lower reach of the Au Sable River and Lake Huron to the upper reaches of the river. The owners of the dam are operating under a charter from the Federal Government. The plan adopted for the fishway follows closely on the lines of the most widely used and satisfactory fishway in the United States. The flume consists of a timber box 3 feet 3 inches wide and 3 feet 3 inches deep inside measurement. The bottom is of 3-inch plank and the sides are 6″ x 6″ timber well drift bolted. The flume rests on a rock-filled crib 6 feet wide; the crib is built of flatted cedar, is well drift bolted and filled with rock. The

upper 22 feet of the flume is carried on a framed bent trestle. The outside of the trestle is sheeted with plank to protect the bents from ice floes. The bottom of the flume is 18 inches below low water level. At the upper end the bottom 18 inches below normal summer level is controlled by the dam. The flume is divided into a series of compartments 5 feet 3 inches long, separated by baffle boards 2 feet 9 inches in height; these baffles control the level in each compartment and render the compartment a still pool in which the fish may rest. Each baffle is provided with a door about 12 inches wide and from 12 to 14 inches in height. The water escapes from pool to pool through these doors and the fish pass up the flume from pool to pool through the doors. The flow of water is regulated at the upper door. The fish have to resist a head of water 15¾ inches in passing from pool to pool. The top of the flume is protected by timbers forming an open grillage. Walter Gilbert was foreman in charge of the work. Total cost, $2,100.00.

REPAIRING AND RECONSTRUCTION OF BRIDGES AND OTHER PUBLIC WORKS FROM THE MAINTENANCE FUND.

Rainy River District.

Cameron Creek Bridges.—Located over Cameron Creek in the Township of Morley. A new railing was placed on the bridge and the approaches were graded.

Locking Bridge.—Located over a ravine at Lots 37 and 41 on the River Road in Lash. A bad washout had taken place. Two pile bents were put in, new deck put on, and the approaches at each end properly graded.

Kenora District.

Anderson Road Bridges.—Located on Lots 16, 17 and 18, north of the Winnipeg River, in the Township of Mellick. Three timber bridges were constructed and the approaches graded:

The bridge on Lot 16 is 175 feet long.
The bridge on Lot 17 is 120 feet long.
The bridge on Lot 18 is 220 feet long.

Aubrey Bridges.—On Lots 22 and 24 in the 6th Con. of Aubrey: three corrugated pipes were removed and replaced with wooden culverts.

Southworth Bridges.—A timber bridge was constructed over McKenzie Creek on Lot 6, Con. 5, Southworth. The bridge has a clear span of 18 feet; 14-foot roadway, crib abutments, stone fill. The approaches are well graded.

Wainwright Bridges.—A culvert 5 feet wide was constructed on road between Lots 2 and 3, the 4th Con. of Wainwright, and a timber bridge 118 feet long was constructed at Lot 7, Con. 2, Wainwright.

Thunder Bay District.

New decks were placed on bridges over Pearless Creek and Beaver Creek in the Township of Gillies.

Algoma District.

Beaudoin Creek Bridge, Shakespeare.—Three miles north of Webbwood. A new deck was placed on this bridge and the approaches properly graded.

Black Creek Bridge, Victoria Salter Townline.—This bridge is 40 feet long. A new deck was placed on the bridge and the approaches graded.

Fourth Concession Bridge, Aberdeen.—This bridge was completely overhauled, new pile bents driven, new stringers and new floor. The approaches were also graded.

Galbraith Bridges.—No. 1 located over Dickson Creek, Lots 3 and 4, Con. 6. A pile structure 18 feet long was reconstructed and the approaches graded. No. 2 at Lots 3 and 4, Con. 6. The bridge, which is 19 feet long, was reconstructed with cedar timber throughout and the approaches well graded.

Iron Bridge.—A new floor and railing were placed on the steel bridge at Iron Bridge, Mississagua River. The approaches were also repaired.

Massey-Spanish Bridge.—The approach to this bridge on the north side of the river had fallen away. The bridge is supported on steel posts on concrete bases. The fill being supported by a timber wall, this wall failed and the fill went out. To make a permanent job the steel posts were encased in concrete. The earth fill was removed and a new fill of stone put in. The stone falls to a natural slope around the steel posts and is protected at the top with a concrete wall. The long built-up approach is built of a very fine sand which easily washes away. A stone facing was placed at each side of the fill, which is 140 feet long. Walter Robinson was foreman in charge.

Webbwood Spanish Bridge.—Located over the Spanish River, southeast of Webbwood. The repairs consisted of replacing defective timbers in the approaches. A number of the frame bents had been pushed out of position by the slipping of the fill. New fills were put in, the bents were properly braced to prevent further movement. A new floor of 3-inch plank with railing and wheel guard was placed on the entire bridge, which is 510 feet long. Walter Robinson was foreman in charge.

Sudbury District.

Hagar Siding Bridge.—Located over the Veuve River at Hagar Siding. The bridge was injured by an ice jam in the Spring of 1919. The repairs consisted of repairing and raising the crib abutments 2 feet, filling the

cribs with stone and regrading the approaches. Angle irons were placed on the up-stream corners of cribs.

Hanmer Rayside Culvert.—The spring flood of 1919 washed away part of the fill at south side of the culvert at the south-west corner of Hanmer. The bottom is soft sand, a large hole was scoured under the bridge. The bottom was refilled with large stone and the sides also filled with stone, restoring the road grade.

Rapid River Bridge.—A new timber bridge with a 20-foot span built over the Rapid River in the Township of Loughrin. The abutments are timber cribs stone filled.

Vermillion Bridge, Morgan Townline.—The approaches to this bridge were washed out by the spring flood. New pile bents were driven and timber approaches were constructed to replace the earth fill.

Manitoulin District.

Nairn Spanish Bridge.—The bridge over the Spanish River at Nairn Centre has been damaged by ice and logs from year to year. Boom timbers could not be held in place and the centre pile pier was repeatedly injured. A row of guard or anchor piers were placed above the bridge to hold the boom timbers. The guard piers are timber cribs strongly constructed around well-driven piles. The piers are filled with stone. A strong timber crib was also placed around the centre pier of the bridge and was also filled with stone. The bridge, which is 310 feet long, was refloored and a new railing put on. The whole structure was left in a first-class condition.

Sturgeon Falls District.

Caldwell-McPherson Townline Bridge.—Locally known as the Rainville Bridge. It was entirely reconstructed. The bridge has a clear span of 15 feet, timber crib abutments 6 feet in height and stone filled. The deck and floor are of flatted cedar. A good strong railing was put on and the approaches well graded.

North West Arm Bridge.—61 new flatted stringers were placed in the bridge. Some bents were raised. 206 lin. feet of floor of 3-inch plank were renewed. The railing repaired and 790 cubic yards of gravel were placed on the approaches to raise them above flood level.

Pelland Bridge.—Located over a creek on the Caldwell-MacPherson boundary. The north abutment was rebuilt with cedar timber and filled with stone. Defective stringers were replaced and a new floor of flatted cedar was put on. The approaches were graded and the bridge left in first-class condition.

Sylvestre Bridge.—Located on the Caldwell-Kirkpatrick boundary. Defective timbers were removed and the old crib abutments raised 18 inches. A new deck, floor and stringers of flatted cedar were put on and

strong guard rails placed. The approaches were properly graded. A. L. McDonald, Public Works foreman, was in charge of this work.

Temiskaming District.

Harley-Kerns Townline Bridge.—Located on Concession 1. It is a cedar culvert 4 feet x 4 feet inside measure, 55 feet long, to replace a burnt bridge. The culvert is covered with earth and a proper road grade established.

Tomstown Bridge.—The sheeting on the piers was repaired and a large section of the floor was replaced.

Wabis Bridge, 4 and 5, Con. 5, Kerns.—A new timber bridge on the 4th and 5th Sideline, Con. 5, Kerns, constructed. It has a centre span of 45 feet, with 16-foot approach spans at each end. Pile piers support the deck. The approaches are well graded. D. H. McIntosh was foreman in charge.

Parry Sound District.

Galna Bridge, Burks Falls.—During the construction of the centre pier of this bridge, the crib became separated and the flow of water removed the cement from the concrete. The defective concrete was washed away from year to year, leaving the pier in danger of total collapse. To effect repair, the dam below the bridge was opened and the river unwatered. A new strong crib was placed around the pier and 2 feet outside of it. All defective concrete was removed and new concrete was placed around the crib, completely filling the worn places. The new concrete shell is well reinforced to hold it in place and the timber casing is also left in place. T. J. Paget was foreman in charge.

Orange Valley Bridge.—Located at Lot 28, Con. 5, Spence. It is a timber bridge with a 16-foot span, on crib abutment. All the timber used was flatted tamarac. The approaches are well graded.

Muskoka District.

Baysville Bridge.—An entire new floor of 3-inch plank was placed on this bridge.

Big East Bridge.—A new plank floor of 3-inch plank was placed on this bridge.

Port Sydney Bridge.—A new floor of 3-inch plank was placed on the bridge.

Victoria and Haliburton.

Fishing Ground Bridge.—This bridge in the Township of Longford was rebuilt throughout. The bridge is 35 feet long.

The Forks Bridge, also in the Township of Longford, was repaired. All defective timber in floor and stringers was removed and replaced with new timber.

North Hastings.

Egan Creek Bridge.—Located over Egan Creek on the Carlow Road in Dungannon. The bridge was entirely renewed in timber.

Farraday Bridge.—A timber bridge over a creek on Lot 13, Con. 16, of Farraday, was entirely renewed in timber and the approaches properly graded.

Parks Bridge, Limerick.—Located on a creek at Lot 28, Con. 8, Limerick. The old bridge was entirely removed and replaced with a cedar structure. The approaches were well graded.

Renfrew District.

Griffith Bridge.—The water broke through the fill at the new bridge at Griffith and carried away a long section of the fill. To guard against further damage, a rubble stone wall set in cement mortar was placed along the up-stream face of the fill. The washed-out section was renewed. There is no further danger from the water. J. H. Zummach, local road inspector, was in charge of the work.

PUBLIC WORKS FOR NAVIGATION.

Dredging.—During the season the dredge worked full time at the Peninsular Canal at the entrance to Fairy Lake. It will take another full season's operation to complete the work contemplated in the Huntsville waters.

The channels at Magnetawan, Huntsville and Bracebridge were cleared of sunken logs as usual and the buoys placed to mark the channels.

Huntsville Lock.—Very extensive works were carried out on the locks between Fairy's and Mary's Locks. The old timbers were all removed down to the water line. The bottom timbers were found to be as sound as when placed. The lock walls were rebuilt with 12″ x 12″ timbers of British Columbia fir. Above the lock the retaining walls on each side of the channel were rebuilt in concrete above the water line. The piers of the swing bridge were also renewed in concrete. The locks and approaches are now in better condition than when first constructed. The retaining wall on the north side below the lock will be rebuilt in concrete next spring.

Port Carling.—Considerable work was done on the lock platforms. The platforms are decayed and worn out and must be at once renewed.

Magnetawan.—The old dams at Magnetawan Lock are done for. It is a question if they will last through another season.

DRAINAGE WORKS CONSTRUCTED BY THE PUBLIC WORKS DEPARTMENT.

Rainy River Drainage.

Morley Drain, Sec. 14.—A drain 105 rods long was constructed in the south-west part of Sec. 14. It taps the road between Sections 14 and 15, where a culvert was put in. The drain is 3 feet deep and 9 feet wide.

Biddison Creek Drain.—This work consisted of improving the outlet from the Trunk Road at the McIrvine Crozier Townline over a distance of 70 rods. The landowners are extending the drain up-stream.

Dilke Drain.—This work is an outlet for the River Road ditches at Lot 41. The outlet is 100 rods long, 9 feet wide, and 3 feet deep.

Burriss Drain.—2 and 3, Con. 1. This work comprises a drain 1,500 feet long on the west side of the road between Lots 2 and 3 in the 1st Concession, with an outlet 20 rods long to the north-east. Another section 70 rods long was also constructed at the north-west part of Lot 2.

Millar Creek Drain, Curran.—This drain was extended north and west 2,000 feet to tap the road west of Lot 16 in Curran. A culvert was placed across the road at the head of the drain.

Bunting Creek Drain, Nelles.—This work consisted of clearing out a section of the creek on the south-west quarter of Section 6, Nelles, and ditching 82 rods, 10 feet wide on top, 4 feet bottom, and depth 3½ feet. The work is to be extended in 1921 to reach the road north of Section 6.

Blue Drain, Section 10.—This work was the extension of an old drain through Section 10, Blue. A distance of 85 rods was opened up with depth from 2½ to 3½ feet. To be extended in 1921.

Morley Pattullo Townline Drain.—This work was the extension of a drain started last year, 124 rods on the north line of Section 35, Morley, and 80 rods north of Section 36. General depth from 2½ to 3 feet.

Algoma Drainage.

Isbester Road Drain.—A drain 100 rods long was opened up south of Section 3, in Laird, with an outlet 3½ feet deep, north into Bar River.

Lot 7 Drain, Tarbutt Additional.—A drain 300 rods long was opened up west and south through Lot 7, Con. 5, Tarbutt Additional, to provide an outlet for a three-quarter mile section of the Port Findlay MacLennan Road.

Lot 6 Drain, 4th Con., Johnston.—A drain 100 rods long was opened up south from the Trunk Road on the line between Lots 5 and 6, Con. 4, Johnston, to provide an outlet for a section of the Trunk Road.

McDonald Drain, Section 31.—A drain 110 rods long was opened up on the west side of the road between Sections 31 and 32, McDonald, to drain a bad sinkhole in the road.

McDonald Drain, Sections 27 and 34.—A drain 80 rods long was opened on the north side of the road between Sections 27 and 34, McDonald. In 300 feet of this drain an 8-inch tile was placed below the bottom of the open ditch.

Rose Drain, Section 17.—A section of McKinnon Creek 160 rods long was cleared to carry the water from the road through Section 17 in Rose.

Hilton Drain.—A drain 160 rods long was opened up on the south side of Con. 10, Hilton, across Lots 11 and 12, to drain a low section of road.

Thompson Drain, Sections 18 and 21.—A section of creek 100 rods long was cleared out on Section 21 in Thompson to drain the Baker Road north of Section 18. A ledge of rock 81 feet long was blasted from the creek bottom.

Patton Drain.—A drain 110 rods long was opened up on Lot 1, Con. 1, Patton, to provide an outlet for a low section of the 2nd Concession road north of Lot 1 in Patton.

McDonald Drain, Section 3.—A drain 76 rods long was opened up on Section 3 to provide an outlet for a watercourse that drains the roads west and north of Section 3, McDonald.

Hilton Drain, Con. 12.—This work consisted of clearing out 400 rods of creek that was badly obstructed, to provide an outlet for roads.

McDonald Drain, Section 9.—This drain taps the Sault Ste. Marie and Bruce Mines Road near the centre of Section 9, McDonald. The drain extends north-east from this road 170 rods to Bar River.

Thompson Drain, Sections 20 and 21.—This drain is on the south side of the Dean Lake, Mississagua Road, north of Sections 20 and 21. It provides an outlet for the water from Dean Lake Village. The drain is 160 rods long with a general depth of 2 feet.

Jas. Barkley was in charge of all the drainage work in Algoma.

$2,441.00 was expended on the work.

Manitoulin Drainage.

Campbell Drain, Con. 12.—This drain was opened up across Lots 9, 10 and 11, Con. 13, Campbell, to drain a low section of road north of Lots 8 and 9. The watercourse was too crooked for improvement, so a straight course was followed, providing a fine outlet.

Campbell Drain, Lot 23.—A drain was opened up across Lots 23 and 24, Con. 8, of Campbell, to drain a low section of road. The outlet is not complete.

Assiginack Drain, Con. 1.—A drain 90 rods long was opened up on Lots 26, 27 and 28, in the south part of Con. 1.

Robinson Drain.—A drain 160 rods long was opened up on Lot 24, Con. 7, Robinson, to drain a low section of road north of Lot 24.

J. E. Vanmeer was in charge of the drainage work in Manitoulin.

$2,494.00 was expended on the work.

Sudbury District Drainage.

The following drains were opened up in the Sudbury District, under the direction of Basil Ethier, Road Inspector:

Balfour Township, on Lot 8, Con. 2—55 rods in length.
Balfour Township, on Lots 8 and 9, Con. 2—240 rods in length.
Balfour Township, on Lot 9, Con. 5—160 rods in length.
Blezard Township, on Lot 6, Con. 6—160 rods in length.
Blezard Township, on Lots 7 and 8, Con. 6—160 rods in length.
Blezard Township, on Lot 9, Con. 6—28 rods in length.
Broder Township, on Lots 1 and 2, Con. 5—160 rods in length.
Capreol Township, on Lots 4 and 5, Con. 3—480 rods in length.
Capreol Township, on Lots 5 and 6, Con. 4—400 rods in length.
Lumsden Township, on Lot 5, Con. 1—105 rods in length.
Dill Township, on Lot 11, Con. 5—240 rods in length.
Rayside Township, on Lots 1, 2, 3 and 4, Con. 3—480 rods in length.
Capreol and Garson, clearing Whitson Creek—160 rods in length.

In all $2,411.00 was expended on the work.

Sturgeon Falls Drainage.

The following drains were opened up in the Sturgeon Falls District:

Hugel Township, on Lots 3 and 4, Con. 1—160 rods in length.
Hugel Township, on Lot 3, Con. 3—80 rods in length.
Hugel Township, on Lots 2 and 3, Cons. 3 and 4—170 rods in length.
Casimir Township, on Lots 4 and 5, Cons. 2 and 3—105 rods in length.
Casimir Township, on Lots 4 and 5, Cons. 2 and 3—120 rods in length.
Martland Township, on Lot 8, Con. 2—10 rods in length.

Mason Township, on Lot 1, Con. 5—375 rods in length.
Kirkpatrick Township, on Lots 3 to 8, Con. 1—400 rods in length.
Dunnett Township, on Lot 11, Con. 4—22 rods in length.

A Legendre, Road Inspector, was in charge of the work.

In all $2,472.00 was expended on the work.

Temiskaming District Drainage.

Casey-Harris Drain.—This work commences at a good outlet on a creek near the southern limit of Lot 4, Con. 6, Harris, and extends north 210 rods to the Casey Boundary. Thence north through Lot 3, Con. 1, Casey, 80 rods. At the Townline the drain is 3½ feet deep and 8 feet wide. At the top end the drain is 2½ feet deep and 6 feet wide. The drain is doing effective work at the Townline.

Casey-Brethour Townline Drain.—This drain runs in front of Lots 8 and 9 on the boundary and drains a very low section of road.

Harley Drain, Con. 4.—This drain starts on the line between Lots 1 and 2, Con. 4, Harley, and runs south 80 rods, thence west 80 rods, thence south to the road between Cons. 3 and 4, where a new culvert was constructed.

W. E. Kerr, Road Inspector, was in charge of the work.

The total expenditure was $2,454.00.

Nipissing District Drainage.

The following drains were opened up in the District of Nipissing under the direction of P. Rochefort, Road Inspector:

Bonfield Township, on Lots 16 and 17, Con. 10—85 rods in length.
Bonfield Township, on Lots 13 and 14, Con. 13—30 rods in length.
Chisholm Township, on Lots 18 and 19, Con. 11—30 rods in length.
Chisholm Township, on Lot 20, Con. 11—50 rods in length.
Chisholm Township, on Lots 2 and 3, Con. 10—110 rods in length.
Chisholm Township, on Lots 14 and 15, Con. 10—100 rods in length.
Chisholm Township, on Lots 10 and 11, Con. 14—60 rods in length.
Chisholm Township, on Lot 3, Con. 12—120 rods in length.
Chisholm Township, on Lot 19, Con. 11—42 rods in length.
Chisholm Township, on Lot 14, Con. 9—40 rods in length.
Chisholm Township, on Lot 19, Con. 12—30 rods in length.
Chisholm Township, on Lot 6, Con. 17—70 rods in length.
Chisholm Township, on Lot 8, Con. 17—28 rods in length.
Ferris Township, on Lot 18, Con. 3—20 rods in length.
Ferris Township, on Lots 23, 24, 25, Con. 4—155 rods in length.
Ferris Township, on Lot 19, Con. 1—70 rods in length.
Ferris Township, on Lot 17, Con. 10—25 rods in length.
Ferris Township, on Lot 8, Con. 6—30 rods in length.
Ferris Township, on Lot 14, Con. 13—30 rods in length.

Ferris Township, on Lot 14, Con. 2—75 rods in length.
Ferris Township, on Lot 16, Con. 10—40 rods in length.
Ferris Township, on Lot 17, Con. 10—60 rods in length.
Ferris Township, on Lot 23, Con. 10—22 rods in length.
Ferris Township, on Lot 18, Con. 7—6 rods in length.
Ferris Township, on Lot 19, Con. 13—45 rods in length.
Papineau Township, on Lot 18, Con. 12—110 rods in length.
Papineau Township, on Lot 20, Con. 12—30 rods in length.
Papineau Township, on Lot 31, Con. 11—40 rods in length.
Widdifield Township, on Lot 15, Cons. A and B—60 rods in length.
Widdifield Township, on Lot 13, Con. 1—40 rods in length.
Widdifield Township, on Lot 17, Con. 1—25 rods in length.
Widdifield Township, on Lot 22, Con. B—25 rods in length.
Widdifield Township, on Lot 5, Con. 4—40 rods in length.
Widdifield Township, on Lot 19, Con. B—24 rods in length.

In all $2,465.00 was expended on the work.

Parry Sound District Drainage.

A small rock cut 18 feet long and 15 feet wide was taken out on Lot 7, Con. 2, in Strong Township. A large jam of driftwood that had formed at the ledge was also removed to give the creek a free channel and relieve flooded lands and roads above the jam.

$243.00 was expended on the work.

Willow Creek Drain, Vespra.

This work consisted in clearing out the lower section of Willow Creek in East Simcoe. From the 9th Con. of Vespra west to the Nottawasaga River this creek runs through a swamp. It is badly obstructed with log jams, trees and brush, and carries but little water. Parallel with the creek is a larger municipal drain. During flood time the creek overflows into the drain and overtaxes it. The present work to improve the creek commences at the river and extends upstream 2½ miles. The creek has been well cleared of all logs, brush and rubbish, opening up a good clean channel that is now providing a splendid outlet. The work is to be extended in 1921.

$1,092.00 was expended on the work.

Eastern Swamp Drain, Eastnor.

This drain is fully described in the Report of 1919. This year the work was continued upstream to the springs in Albermarle that cause the trouble. The completed drain is doing very effective work. This season $1,602.00 was expended, making a total of $3,102.00 expended on this drain.

Davidson Creek Drain, Keppel.

This drain was designed to lower the water in a small lake, Con. B, Keppel, to provide drainage for a road east of the lake. The work commences at the west end of the lake and runs west along a creek into the 4th Concession. Thence south on the creek from Lot 18 to Lot 13, where it discharges into a sink-hole. The creek was cleared out, deepened and widened over the full length.

$848.00 was expended on the work.

Spence Swamp Drain.

This drain is located in the north-east part of the Township of Arran. The outlet had been opened up from Mud Lake to the east in 1917 and 1919. This year the work was continued south and west from Mud Lake, a distance of 5,200 feet, to the 30-31 Sideroad, which it was originally designed to drain.

$751.00 was expended on this season's work.

Mara Drainage, 1920 (James Drain).

This drain commences near the north-east corner of Lot 29, Con. 11, of Mara. It runs east to the middle of Lot 27. Thence north through Lot 27 in the 11th, 12th and 13th Concessions to Sucker Creek, a total distance of 8,800 feet. The upper half of the drain has a bottom width of 2 feet with depth from 1 to 3 feet. The lower half has a bottom width of 3 feet, with depth from 1 to 2 feet.

$649.00 was expended on the work.

Oak Flat Drain, Hinchinbrooke.

Last year $495.00 was expended on this work, but it was not extended far enough to accomplish the road drainage in view. This year a further sum of $799.00 was expended. This year's work comprised a rock cut 85 feet long, 12 feet wide and from 4 to 5 feet deep. About 800 feet of drain was also opened up with a depth varying from 2½ to 5 feet.

DRAINAGE AID GRANTS IN 1920.

Au Sauble River and Mud Creek Drain, McGillivray.

This drain was designed for the drainage of a large area of swamp land in the south-west part of the Township of McGillivray. The work comprises the clearing out of Mud Creek from the 15th Sideroad west to the middle of Lot 19. From this point a new cut has been constructed along the 6th Concession Road, 2,700 feet, to the Pete Seebe River. This cut has a bottom width of 16 feet with a depth of 5 feet. From the 6th Concession Road west, the Pete Seebe is cleared of obstructions, logs and

brush, to the middle of Lot 9, in the 28th Concession, a distance of 2¼ miles. At this point the river ends and the water spreads over a wide swamp. From the middle of Lot 9 a drain was opened up with a bottom width of 20 feet and a depth of from 3 to 5 feet. The drain joins the Aux Sables near the north line of Lot 3 in the River Range. The total length covered by the work is 35,000 feet, nearly seven miles.

The drainage area affected comprises 63,000 acres. The estimated cost of the work was $14,049.95, which was assessed as follows:

On lands and roads in McGillivray	$10,519.15
On lands and roads in Stephen	381.30
On lands and roads in East Williams	758.90
On lands and roads in West Williams	2,338.10
On lands and roads in Parkhill	52.50

The actual cost of the work completed was $18,700.35.

I examined the drain in July of this year and found the work completed in a satisfactory manner.

On report, the grant of $1.500.00, voted to this work, was paid to the Township of McGillivray.

Big Creek Drain in the Townships West and Tilbury N. in Essex.

This Big Creek drainage scheme is one of the largest of the many large schemes in South-western Ontario.

The work commences at the Townline between Romney and Tilbury West, and extends north along Big Creek to Lake St. Clair, a distance of about thirteen miles.

The upper end of the drain, from the east branch in the 7th Concession to the Romney Townline, a distance of 18,700 feet, has a bottom width from fourteen to eighteen feet, with a grade of 4 feet 9 inches per mile. This part of the drain was done with a ditching machine. From the east branch of the outlet, a distance of 48,200 feet, the work was done with a floating dredge. This part of the drain has a bottom width of forty feet at the upper end, widening to seventy feet at the lower end.

From the 4th Concession Road to the outlet, a distance of five and one-half miles, the banks on each side were built up to a uniform height of 4 feet above water level, to prevent the flood water leaving the drain and flooding the adjoining lands.

The drainage area affected by this drain comprises 55,000 acres, situ-

The original estimated cost of the work was $85,721.00, but the final cost of the work exceeded the estimate by $5,800.00. The estimated cost of the work was assessed against the lands and roads in the different municipalities affected as follows:

On Lands and Roads in Tilbury North	$28,320.95
On Lands and Roads in Tilbury East	454.50
On Lands and Roads in Tilbury West	26,584.15
On Lands and Roads in Mersea	14,459.80
On Lands and Roads in Romney	15,901.60

At the last Session of the Legislature, a grant of $5,800.00 was voted to this drainage scheme under the provision of "The Provincial Aid to Drainage Act." I examined the work in June, 1920, and found the work completed in a workmanlike manner.

On report, the grant of $5,800.00 voted for the work was paid to the Township of Tilbury North.

Dykeman Pumping Scheme in the Township of Chatham.

This work is a pumping scheme for the more efficient drainage of a low lying area of land in the south-west part of the Gore of Chatham. An embankment is constructed across a section of marsh along the north shore of the Chanel Ecarte, on Lots 1 and 2, a distance of 164 rods. Internal drains are improved, a pumping plant has been installed to discharge the water from the drains into the Chanel Ecarte, the pumping plant comprises a large dash wheel driven by an electric motor. The drainage area embraces 800 acres.

The cost of the work, including cost of pumping plant, was $11,000.00. The annual cost of operation is estimated at 20c per acre over the entire area.

I examined the work in July of this year and found the work completed in a workmanlike manner.

On report the grant of $1,200.00 voted for the work was paid to the township of Chatham.

Mud Creek Drain in the Township of North Gower.

This work comprises the improvement of Mud Creek for drainage purposes. It is located in the north part of the Township of North Gower. The work also embraces the improvement of the main branches of the creek, the McEwan drain, the Beamish drain and the Brownlee drain. The scheme embraces 14 miles of drainage work. The estimated cost of the work was $24,000.00.

The main drain, which was constructed with a floating dredge, has a bottom width of 12 to 14 feet, the depth varying from 5 to 8 feet. The branch drains are ordinary drains from 3 to 6 feet in depth.

The drainage area comprises 9,000 acres—6 800 acres in North Gower, 970 acres in Nepean, 980 in Marlborough and 250 acres in Goulbourn.

The drainage work was examined by J. S. Leitch, an Engineer of this Department, during the present month. Mr. Leitch reports the work practically completed. The dredge is proceeding down stream and will be finished within one month.

On report the grant of $2,000.00 voted for this work was paid to the Township of North Gower.

Pike Creek Drain in the Township Maidstone.

This work consists of improvements to the mouth of Pike Creek, one of the largest streams in the County of Essex. Extending over a period of forty years, drainage works have been constructed on the south part

of this stream and on a number of streams and lateral drains leading into it. These works were carried down stream as far as the work could be done by teams. When the lake level was reached, about a mile and one-half from the lake shore, the team work ceased and no further improvements were made on this part of the stream.

Acting on the petition of interested ratepayers, the Township of Maidstone, in 1919, undertook the work of improving the stream from Lot 5 to the deep water in Lake St. Clair, under the provision of "The Municipal Drainage Act." The work as carried out consists of a dredge cut from 40 to 50 feet wide and about 6 feet in depth below the low water level of Lake St. Clair.

A number of bends were cut off and the channel straightened. Two of these bends were cut to protect highways from constant errosion by the stream.

The estimated cost of the work was $11,215.45, but the actual cost exceeded this estimate by about $2,000.00. The assessment on the different municipalities interested was as follows:

On Lands and Roads in Maidstone	$6,130.05
On Lands and Roads in Sandwich East	120.85
On Lands and Roads in Sandwich South	3,882.55
On Lands and Roads in St. Clair Beach	382.00
On Grand Trunk Railway	700.00

I examined the work in June, 1920, and found all the works properly completed except some spreading of earth on the Tecumseh Road.

On report, the grant of $1,000.00 voted for this work was paid to the Township of Maidstone.

Udney Drain in the Township of Mara in North Ontario.

This drain commences at the Sideroad between Lots 10 and 11 in the 9th Concession of Mara and runs in a westerly and south-westerly course to a creek on Lot 21 in the 7th Concession, a short distance from Lake Simcoe. The drain is 25,935 feet long, or nearly five miles. The drain has a bottom width of 3 feet at the head and gradually widens to 10 feet at the outlet. The depth varies from 1 to 5½ feet. The drainage area comprises some 2,000 acres.

The estimated cost is $13,950.00, which is assessed against Lands and Roads, in the Township of Mara.

The drain was examined during the present week by J. W. Hackner, an Engineer of this Department, who reports the work completed except for some little trimming and clearing.

The Engineer in charge, A. C. Cavana, reports that the work complete will cost about $17,000.00, or $4,050.00 more than the estimated cost.

On report, the grant of $2,500.00 voted for this work was paid to the Township of Mara.

I have the honour to be, Sir,

Your obedient servant,

A. J. Halford,
Engineer of Public Works.

Toronto, Oct. 21, 1920.

Statement of Expenditure on Capital Account for Public Buildings, Public Works, Drainage, etc., for the year ending October 31st, 1920.

PUBLIC BUILDINGS:	
Parliament Buildings: To provide additional accommodation, etc.	$49,969 89
Osgoode Hall	15,823 30
Ontario Hospital, Brockville	13,426 26
" " Hamilton	11,581 14
" " Kingston	54,760 60
" " London	32,489 54
" " Mimico	2,536 86
" " Orillia	65,434 02
" " Penetang	5,238 06
" " Whitby	284,078 20
" " Woodstock	698 89
Mercer Reformatory	461 84
Industrial Farm, Burwash	173,984 51
" " Fort William	133 00
Normal and Model Schools, Toronto	19,658 84
" " " Ottawa	123,517 12
" School, London	1,965 26
" " Hamilton	1,891 08
" " Peterboro	626 50
" " Stratford	870 50
" " North Bay	4,838 34
School for the Deaf, Belleville	62,583 04
School for the Blind, Brantford	3,689 88
English-French Training School, Sandwich	1,048 76
English-French Training School, Sturgeon Falls	14,796 92
O. A. C., Guelph	44,596 32
Horticultural Experimental Station, Vinelands	4,768 38
Ontario Veterinary College	1,818 37
Algoma District	35,894 70
Kenora District	889 68
Manitoulin District	501 82
Muskoka District	1,949 92
Nipissing District	1,548 27
Parry Sound District	1,547 10
Rainy River District	790 08
Sudbury District	3,232 21
Temiskaming District	2,494 04
Thunder Bay District	3,544 54
MISCELLANEOUS:	
Compensation for Workmen injured on Government Works	686 54
Fish Hatchery, Port Arthur, House for Superintendent	3,209 15
Fish Hatchery, Mt. Pleasant: Claim of Jas. A. Smith for sand used in Construction	130 00
Insurance	4,099 64
Total Public Buildings	$1,057,903 11
PUBLIC WORKS:	
Ahmic Bridge and Dam	$16,714 46
Arnold Creek Bridge, Lots 2 and 3, Con. 1, Conmee	341 71
Avery Creek Bridge	317 77
Bastien Bridge	1,938 70
Bar River Bridge, Trunk Road	2,939 57
Beckett Bridge, Calvin	606 56
Big Head River Bridge	2,332 85
Baptiste Creek Bridge, Henwood T. L.	356 00
Bedard Bridge, Sec. 22 and 27, Korah	2,937 85
Bird's Creek Bridge, Lot 12, Con. 3, Herschell	314 25
Birkendale Bridge, Con. 6, Franklin	234 30
Black Creek Bridge, Lorne	499 81
Black Creek Bridge, Vespra	1,774 54
Blackwater Bridge, Con. 12, Christie	899 24

PUBLIC WORKS.—*Continued.*

Bluejay Creek Bridge, Tehkummah	635 00
Blue Sea Bridge, Con. 1, Bonfield	231 09
Blue Sea Bridge, Con. 10, Bonfield	708 98
Bothwell Creek Bridge, 25 Sideline, Sydenham	2,785 27
Boulter Townline Bridge	424 00
Brett Creek Bridge, Con. 6, Allen	299 50
Burnt River Bridge, Con. 11, Somerville	53 20
Chelmsford Bridge	1,454 05
Cache Creek Bridges, 2nd Line, Springer	4,958 50
Clyde River Bridge, Folger	400 00
Chippewa Creek Bridge, O'Brien St., Widdifield	1,751 14
Commanda Bridge, Nipissing Road	335 16
Depot Creek Bridge	969 49
Dixon Creek Bridge, Liskeard Road	1,648 15
Dufferin Creek Bridge, Nipissing Road, Spence	2,107 24
Distress Bridge, Magnetawan	2,276 77
Dana Bridge, Dog River	3,287 53
Equipment, Instruments, Machinery, etc.	7,518 83
Eleventh Concession Bridge	68 00
Eleventh Concession Bridge Unpaid Accounts, 1918-19	43 50
Egan Creek Bridge, Lot 10, Con. 10, Dungannon	1,223 85
Elm Creek Bridge, Kennebec	598 12
Equipment, etc., Unpaid Accounts, 1919	258 77
Fifth Line Bridges (2), Carpenter	1,073 49
Fishways, Construction of	1,986 09
Falardeau Bridge, White River	2,900 76
Gilroy Creek Bridge, Con. 14, Wollaston	585 43
Gleason Bridge, Lot 23, Keppel	1,701 30
Gould Road Bridge, Jaffray	1,982 48
Great Northern Road Bridge, Plummer	684 07
Gulch Bridge, Marmora	299 50
Grassy River Bridge, 3rd Line, McCrossan	1,585 51
Haddock Bridge, Hinchinbrooke	524 56
Harley-Casey T. Line Bridges	2 078 05
Hurd Creek Bridge, Sebastopol	500 00
Hog Creek Bridge, 5th Con., Tay	410 61
Hurdville Bridge, McKellar	3,650 22
Indian River Bridge, Sarawak	1,980 59
Ignace Bridge	423 62
Johnston Creek Bridge, T. L. Oakley	297 30
Kilby Bridge, Lot 12, Con. 5, Algoma	2,265 15
Keppel Bridge, Indian River	2,424 94
Kushog Lake Bridge, Snowden	2,359 96
Long Creek Bridge, Bala Road, Wood	510 45
Long Bridge, Black Creek, Con. 8, Stisted	970 93
Linton Line Bridge, Indian River, Sarawak	2,704 10
Lount Distress Bridge, Con. 2	237 40
Lunn Creek Bridge, Pellatt	19 05
Lot 9 Bridge, Con. 10, Ryde	1,773 49
Lockmasters, Bridge Tenders, etc.	5,622 92
Larocque Bridge, Widdifield	525 23
Laird Bridge, Section 3	140 85
Lavalle Bridge, 34-27, Devlin	973 88
Lot 8 Bridge, Muskoka Road, Unpaid Accounts 1918-19	40 35
Maintenance, Locks, Dams, etc.	63,793 05
Maintenance, Locks, Dams, Unpaid Accounts 1918-19	782 86
Massey Bridge, Floor	2,438 79
Middle Branch Bridge, Snowden	1,549 42
Mine Road Bridge, Van Horne	211 25
Monck Bridge, River Road	1,569 21
Mud Creek Bridge, Con. 7, Billings	696 49
Meglund Bridges	397 91
Manitoulin Bridges	62 64
Manitoulin Bridges, Unpaid Accounts 1918-19	362 58
North Creek Bridges (3), Widdifield	
Nesterville Bridge, Lefroy	1,911 85
North Road Bridge, Dymond	207 51
North River Bridge, 3rd Line, Matchedash	22 80
Narrows Bridge, Unpaid Accounts, 1918-19	65 02

PUBLIC WORKS.—*Continued.*

Oxdrift Road Bridge	339 17
Pine River Bridge, Lots 6 and 7, Patullo	1,574 43
Pitch Creek Bridge, Con. 3, Marks	200 00
Pearson Township Bridges	500 84
Pickerel Creek Bridge, Con. 6, Bright	1,536 45
Potomac Bridge, Cobden	1,420 05
Port Carling Works	1,353 93
Redditt Bridges	1,954 48
Rice Marsh Bridge, Wainwright	2[illegible]5 70
Richeu Road Bridges	487 41
River Road Bridge, Lot 48, Aylesworth	805 25
Robinson Creek Bridge, Norway Point, Ridout	149 75
Ryerson Swing Bridge	2,060 97
Rainville Bridge, Caldwell McPherson	191 30
Surveys and Inspections	5,384 72
Surveys and Inspections, Unpaid Accounts 1918-19	713 98
Second Line Bridge, Balfour	699 47
Serpent River Bridge	1,194 02
Silver Creek Bridge, Ridout	221 21
Silver Creek Bridge, Tarentorus	559 07
Southern Bridge, Sturgeon Falls	4,513 69
Section 13 Bridge, Dobie T. L.	927 63
Seguin Bridge, McDougall	3,932 73
Second Line Bridge, Lot 1, Mather	585 46
Sauble Bridge, Con. 12, Amabel	2,685 35
Shewfeldt Creek Bridge, Trunk Road, Laird	1,704 83
Seventh Concession Bridge, Fenelon, Grant	600 00
Sideline Bridge, Cons. 3, 8, 9, Mather	295 37
South Pine Bridge, Lot 34, 35, Morley	889 61
Sharbot Lake Bridge	7,831 58
Slatter's Creek Bridge, Con. 13, Brumiel	272 06
Sparks Creek Bridge, Con. 5, Bonfield	506 10
St. Joseph Island Bridges, Con. 1	976 70
Sandy Creek Bridge, Sebastopol	500 00
Section 10 Bridge, Tarentorus	1,849 46
Sturgeon Bridge, Lots 2 and 3, Shenstone	1,637 85
Storring Bridge, Lot 6, Con. 9, Elziver	1,872 67
Swamp Creek Bridge, Boulter	324 00
Third Line Sturgeon Bridges (2), Kingsford	972 69
Third Line Bridge, Lot 8, Mather	416 98
Third Line Bridge, South River	229 94
Thompson Creek Bridge, Con. 6, Monteagle	279 87
Thirteenth Line Bridge, South River	3,086 54
To Pay Law Costs re Kaukhumen vs. Korah	868 89
To Pay Mrs. Kingshotter damage to goods in Blasting	25 00
Tyon Road Bridge, Alden, Grant	400 00
Turtle Creek Bridge, Sheginandah	897 11
Trout Creek Bridge	3,939 62
Temiskaming Bridges	1,160 71
Ufford Road Bridge, Lot 13, Con. 4, Watt	1,633 36
Veuve Bridge, Caldwell	184 00
Veuve Bridge, Unpaid Accounts 1918-19	68 20
Wabigoon Falls Bridge	1,380 13
Withers Bridge, Victoria, Section 26	799 89
Whitson Creek Bridge, 5th Line, Balfour	103 00
Walters Falls Bridge, Sydenham River, Holland	878 86
Wye River Bridge, Tiny	2,237 71
Willow Creek Bridge, Vespra	1,057 04
White Oak Creek Bridge	3[illegible]3 79
White Oak Creek Bridge, Unpaid Accounts 1918-19	512 00
Wages and Expenses of Supervising Foremen	3,717 60
Public Works, Bridges, etc.	$269,070 91

Drainage Works:	
Algoma District Drainage	$2,469 73
Draining Rainy River Roads, Unpaid Accounts 1918-19	12 25
Draining Rainy River Roads	4,969 71
Davidson Creek Drain, Keppel	849 85
Eastern Swamp Drain, Eastnor	1,602 00
Muskoka District Drainage	2,474 43
Mara Township Drainage	649 83
Manitoulin District Drainage	2,494 71
Nipissing District Drainage	2,475 60
Nipissing District Drainage, Unpaid Accounts 1918-19	180 50
Oak Flat Road Drain	622 28
Parry Sound District Drainage	400 00
Spence Swamp Drain, Arran	750 95
Sturgeon Falls District Drainage	2,467 50
Sudbury District Drainage	2,403 85
Temiskaming District Drainage	2,467 62
Temiskaming Road Drainage	344 50
Temiskaming Road Drainage, Unpaid Accounts 1918-19	291 50
Willow Creek Drain, Vespra	1,091 93
Drainage Works	$29,018 74
Drainage Aid:	
Aux Sable and Mud Creek Drain, McGillivray	$1,500 00
Udney Drain, Mara	2,500 00
Salter Drain, Salter, May-Harrow	1,200 00
Mud Creek Improvement, North Gower	2,000 00
Pike Creek Drain, Maidstone	1,000 00
Big Creek Drain, Tilbury North	5,800 00
Dykeman Pumping Scheme, Chatham	1,200 00
Drainage Aid	$15,200 00

STATEMENT

OF

SECRETARY

AND

LAW CLERK

STATEMENT No. 4.

Showing the several contracts and bonds entered into with His Majesty during the twelve months ending the 31st of October, 1920, in connection with the Public Buildings and Works, subject to the control of the Public Works Department.

Date	Location of Works.	Subject of Work.	Contractors.	Sureties.		Amount.
1920 Jan. 7 ..	Kingston Hospital, Nurses' Home.	Supply of Material and Work for Plumbing and Heating.	McKelvey & Birch, Ltd. Kingston.	C. A. Macpherson & John J. Druce, Kingston.	.....	$5,782 00
Jan. 7 ..	Kingston Hospital, Nurses' Home.	Electric Conduit System and Wiring.	H. W. Newman Electric Co. Ltd., Kingston.	Robt. J. Rodgers & Joseph Alex. Newman Kingston.	.....	1,300 00
Jan. 8 ..	Orillia Hospital	Supply of Pump, Motor and Starter.	Storey Pump & Equipment Co., Toronto.	.....	.....	3,708 00
Feb. 13 ..	Guelph Agricultural College, Apiary Building.	Plumbing, Heating and Ventilating System.	Purdy-Mansell Ltd., Toronto.	F. J. Lucas & P. E Mansell, Toronto.	.....	6,500 00
Feb. 13 .	Guelph Agricultural College, Students' Residence	Plumbing, Heating and Ventilating System.	Purdy-Mansell Ltd., Toronto.	F. J. Lucas & P. E Mansell, Toronto.	.....	20,217 00
Feb. 13 .	Guelph Agricultural College, Students' Residence	Electric Conduit System and Wiring.	Albert W. Smith Co. Ltd., Guelph.	London Guarantee & Accident Co., Ltd. Toronto.	.....	3,250 00
Feb. 13 ..	Guelph Agricultural College, Apiary Building.	Electric System and Wiring.	Albert W. Smith Co. Ltd., Guelph.	London Guarantee & Accident Co., Ltd. Toronto.	.....	1,895 00
April 13..	Toronto Parliament Buildings.	Steel Cases D. and E. Archives Branch.	Office Specialty Mfg Co., Toronto.	.....	.....	1,835 00
May 18 ..	Toronto Normal School, Government House, Parliament Buildings and Veterinary College.	Supply of Coal and Wood, 1920-21.	Standard Fuel Co. of Toronto.	G. Nash & Chas. T. Logan, of Toronto.	Stove, Nut and Egg Pea ..... Mine Run ..... Pine Slabs	15 00 11 25 10 50 14 00

May 18 ..	Ottawa Normal and Mode Schools.	Supply of Coal and Wood, 1920-21.	Independent Coal Co. Ottawa.	T. A. Shore & J. B. Lefebre, Ottawa.	Egg	12 50
					Soft	9 50
					Pine Slabs	7 00
May 18 ..	London Normal School .	Supply of Coal and Wood, 1920-21.	Wm. Buchanan, London	J. Holland & E. Fisher, London.	Egg	14 50
May 18 .	Hamilton Normal School.	Supply of Coal and Wood, 1920-21.	Dominion Lumber & Coal Co. Ltd., Hamilton.	Herbert Brennan & E S. Smith, Hamilton.	Egg	15 00
					Nut	15 00
					Slabs	12 50
May 18 .	North Bay Normal School	Supply of Coal and Wood, 1920-21.	North Bay Fuel Company.	J. A. Lambertus & Frank W. Duncan North Bay.	Egg	15 00
					Slabs	7 75
May 18 ..	Peterboro Normal School	Supply of Coal and Pine Slabs.	H. B. Taylor & Sons.	J. F. Allen & E. B. Fowler.	Egg	17 00
					Slabs	10 00
May 18 .	Stratford Normal School.	Supply of Coal	The Milnes Coal Co., Toronto.	.....	Run of Mine Soft Coal	11 95
May 21 .	Burwash Industrial Farm	Supply of Two Tubular Boilers.	Waterous Engine Works, Brantford.	.....	.....	6,635 00
May 21 .	Guelph Agricultural College.	Supply and Construction of Concrete Trenches.	P. H. Secord & Sons Construction Co. Ltd., Brantford.	.....	.....	2,315 00
June 19..	London Hospital	Heating System in Fire Hall and Extension to Main Building.	Noble & Rich, London	A. Nobbs & L. Ross London.	.....	3,155 00
June 18..	Guelph Agricultural College.	Hardware for Apiary and Students' Building.	Aikenhead Hardware Ltd., Toronto.	.....	.....	4,289 45
June 17..	Matheson Public School.	Supply and Construction of School.	Robt. Wallace & Son North Bay.	A. H. Kilgour & Chas S. McGauhey, North Bay.	.....	29,143 00
June 30..	Belleville School for Deaf	Supply of Hard Coal, 1920-21.	Downey Coal Co., Belleville.	Jas. Connelly & Hugh O'Hara, Belleville.	Egg, Nut and Stove.	15 25

STATEMENT No. 4—Continued.

Showing the several contracts and bonds entered into with His Majesty during the twelve months ending the 31st of October, 1920, in connection with the Public Buildings and Works, subject to the control of the Public Works Department.

Date	Location of Works.	Subject of Work.	Contractors.	Sureties.	Amount.
1920 June 30..	Belleville School for Deaf.	Supply of Slack Coal ..	Downey Coal Co., Belleville.	Jas. Connelly & Hugh O'Hara, Belleville.	5% on cost of Slack delivered at School.
June 30..	Belleville School for Deaf.	Supply of Slack Coal ..	Schuster Co. Ltd., Belleville.	.....	5% on cost of Slack delivered at School.
June 30..	Brantford School for Blind	Supply of Hard and Soft Coal.	D. McDonald, Brantford	S. P. Pitcher & J. Fair Brantford.	Soft ..... 14 75 Hard 15 00
July 5 ..	Sturgeon Falls English-French Training School.	Supply and Construction of School.	Jeffrey & Stevens, North Bay.	United States Fidelity & Guaranty Co.	..... 45,200 00
Aug. 10 ..	Guelph Agricultural College.	Supply and Installing Electric Freight Elevators and Gates.	Turnhull Elevator Co., Toronto.	.....	..... 2,560 00
Aug. 12 ..	Ottawa Normal School ..	Painting	Alf. G. Bassett, Ottawa	London & Lancashire Guarantee & Accident Co. of Canada.	..... 3,275 00
Sept. 18..	Kingston Hospital	Supply of 6" Cast Iron Pipe.	National Iron Corporation Ltd., Toronto.	.....	$100 net ton f.o.b. Toronto.
Sept. 21..	Kemptville Agricultural School, Mechanics' Building.	Supply and Installing Steam Heating.	McKelvey & Birch, Ltd. Kingston.	C. A. Macpherson & J. I. Druce, Kingston.	..... 1,605 00
Oct. 4 ..	Toronto Parliament Buildings.	Supply of Steel Fittings in Treasury Vault.	The Steel Equipment Co., Ottawa.	.....	..... 7,490 00

H. F. McNAUGHTON,
Secretary and Law Clerk, Public Works Department, Ontario.

Distributing Parent Bass by Tank Car.

Fourteenth Annual Report

OF THE

GAME AND FISHERIES DEPARTMENT

1920

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
Printed and Published by CLARKSON W. JAMES, Printer to the King's Most Excellent Majesty
1921

Printed by
THE RYERSON PRESS

To His Honour LIONEL HERBERT CLARKE,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith, for the information of Your Honour and the Legislative Assembly, the Fourteenth Annual Report of the Game and Fisheries Department of this Province.

I have the honour to be,

Your Honour's most obedient servant,

H. MILLS,

Minister of Mines.

Toronto, 2nd February, 1921.

FOURTEENTH ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

To the Honourable H. MILLS,

Minister of Mines.

SIR,—I have the honour to place before you the Fourteenth Annual Report of the work of the Game and Fisheries Department for the fiscal year ending October 31st, 1920. It will be noted that the marked increase in net revenue since 1917 still continues and the total net revenue for the year amounts to $327,557.67, of which amount the Department proper contributed $226,572.73 and the Sales Branch $100,984.94. A statement of the Sales Branch operations is shown elsewhere in this report.

Comparative Statement of Revenue and Expenditure—Game and Fisheries Department, 1915-1920, as Published in the Public Accounts.

	Revenue.	Expenditure.	Surplus.
1915	$168,763 47	$152,872 41	$15,891 06
1916	174,186 71	157,681 94	16,504 77
1917	219,442 94	154,055 17	65,387 77
1918	258,671 62	167,795 22	90,876 40
1919	346,197 14	185,247 72	160,949 42
1920	466,550 86	239,978 13	226,572 73
SALES BRANCH.			
1920	$353,214 85	$252,229 91	$100,984 94

Statement showing the revenue received from game and also that received from fish in the year 1915 as compared with the year 1920.

	1915.	1920.	Increase.
Revenue from Game	$52,956 68	$313,132 39	$260,175 71
Revenue from Fish	115,806 79	153,418 47	37,611 68
	$168,763 47	$466,550 86	$297,787 39

STATISTICS.

The statistics accompanying this report aside from other details show variety, quantity, and location of all fry and fingerlings distributed from Provincial hatcheries, together with quantity, variety and value of commercial fish produced for 1919 and fishing equipment used, with comparison with other years. All of which have been carefully prepared and affords interesting and valuable information.

Fish.

Commercial licenses were issued in 1919 for 5,960,158 yards of gill nets, 190 seines, 1,144 pound nets, 1,417 hoop nets, 36 dip and roll nets, 199 spears, as well as 69,000 hooks, giving employment to 4,156 men on 123 tugs, 768 gasoline boats and 1,285 sail or row boats. The estimated value of investment in boats, freezers, ice houses, wharves and twine is $3,039,682.00.

The aggregate catch for the year amounts to 38,145,458 pounds, at an estimated value to fishermen of $2,721,440.24.

The 1920 reports received from various sources would show that angling for game fish had been very satisfactory and a large number of non-residents have taken advantage of the excellent fishing obtained in so many parts of the Province.

Game.

Moose and Deer are reported to be quite plentiful and the season has been favourable for hunting, although too mild in many sections to have game kept in first class condition. The number of hunting licenses issued for the year is as follows:

796 Non-resident.
16,943 Resident Deer.
1,988 Resident Moose.

Ruffed Grouse commonly known as *Partridge*.—The numerous reports received in respect to the large number of partridge in the Province permitted the close season to be opened for a period of 15 days, which was welcomed by sportsmen who are appreciative of the protection given by a close season for a number of years.

Quail and Pheasants.—Do not appear to have increased in numbers.

Ducks.—From reports have been taken in goodly numbers as in former years.

Furs.

An abnormal condition in the fur market, which caused unheard-of prices to be paid for all varieties of pelts, continued until early spring and the values placed on furs of every description tempted a very large number of persons to enter into the fur trade, and a corresponding number of persons to hunt and trap. Licenses issued to fur dealers represented fees amounting to $34,850.27, being an increase of $17,176.31 over the previous year, and fees collected from the sale of trappers' licenses amounted to $75,223.54, being an increase of $36,630.88 over the preceding year. The fur market, however, has since last spring taken a decided reaction and the pendulum has temporarily, at least, swung far in the opposite direction and will, no doubt, have its effect both on the number of dealers' and trappers' licenses sold next year.

Beaver.—Are plentiful in Northern Ontario and a large number were trapped during the season.

Otter.—Are not plentiful.

Marten and Fisher.—Are not reported as plentiful.

Muskrat.—Are apparently on the decline.

As a guide to the importance of the fur-bearing animals as a resource of the Province, a list as shown below of the pelts exported and tanned will furnish some idea of the value of the pelts specified and the importance of the fur trade.

For 12 Months Ending October 31st, 1920.

	Exported.	Tanned.	Total.
Beaver	88,218	7,788	96,006
Fisher	4,036	33	4,069
Marten	6,225	90	6,315
Mink	29,101	4,594	33,695
Muskrat	282,593	151,473	434,066
Otter	3,926	168	4,094

For 5 Months Ending October 31st, 1920.

	Exported.	Tanned.	Total.
Bear	355	54	409
Fox (Cross)	34	5	39
Fox (Red)	174	57	231
Fox (Silver or Black)	11	..	11
Fox (not specified)	237	3	240
Lynx	165	5	170
Raccoon	20	301	321
Skunk	196	886	1,082
Weasel (Ermine)	2,233	862	3,095

making a total of 583,843 skins. The estimated value to the trapper is placed at $5,811,146.39, being an average of the prices paid for the past year.

Game Sanctuaries.

Since my last annual report, the Nopiming Game Sanctuary has been created and is situated between the Counties of Carleton and Renfrew. This is a valuable addition to the few sanctuaries that now exist and I must once more strongly recommend that immediate steps be taken to provide for more sanctuaries in that part of the Province that is so suitable from natural conditions to afford the very apparent present need of Game Preserves of such an area as would tend to protect existing game and to reproduce that which has been so lavishly taken, particularly during the period just past when abnormally high prices prevailed.

Hatcheries.

During the year, the hatchery under construction at Fort Frances was completed and a successful hatch and distribution of pickerel was made therefrom last spring. Improvements were also made at the Normandale Hatchery, which included a dwelling house for the use of the officer in charge at that point. The details of the fry and fingerlings distributed for the year appear elsewhere in this report and may be considered as satisfactory under the circumstances, having a total distribution of:

43,985,000	Whitefish Fry.
31,030,000	Pickerel "
1,134,000	Trout "
920,000	Herring "
286,700	Speckled Trout Fingerlings.
427,660	Black Bass "
460	Parent Bass.
Total 77,783,820	

While very rapid development and progress has been made in the extension of Provincial Hatcheries during the past few years, yet the field is far from covered at the present time and very pressing demands are presented by the residents of every district each and every year for a much greater supply and distribution of fry and fingerlings than the Department has available. I would, therefore, recommend that further hatcheries and breeding ponds be constructed as opportunity affords and as capable officials can be obtained to operate same.

Reorganization.

No matter how wise or necessary restrictions and regulations may be, they are worse than useless and bound to fail in providing the desired remedy if the means of enforcing them are not available. In July last, the Honourable F. C. Biggs, the then Minister in charge of the Game and Fisheries Act, after due consideration, decided that a change in the system of the enforcement of the Act throughout the Province was necessary in the best interests of the game and fish, and the large number of part-time overseers has been replaced by full paid officials who devote their entire time to the interests of the Department and who operate under the control and guidance of District Wardens. The new arrangement of the outside staff has only been in effect for a short period, but from the results already obtained, ample proof has been furnished to justify the reorganization and in due time I am convinced that the Act will be better enforced than at any previous period and result in the conservation of the Province's resources of fish and game.

Acknowledgment.

In conclusion, I desire to advise you that in presenting this report, I am indebted to a large extent for what has been accomplished to the co-operation received not only from the several Departments of the Provincial Government, Game Protective Associations and different railway companies, but also to the loyal support given by the several members of the inside and outside staffs, who have performed their duties willingly and efficiently in the best interests of the Department.

I wish to publicly acknowledge the courtesy of the Federal Government in furnishing this Department with two hundred thousand salmon trout and four hundred and fifty thousand pickerel fry to provide for the demand from the public for a greater fry distribution.

All statistics mentioned, as well as many others, will be found in detail in statements published herein.

All of which is respectfully submitted.

I am,

Your obedient servant,

(Sgd.) D. McDonald,

Deputy Minister of Game and Fisheries.

Toronto, November 1st, 1920.

STATEMENT OF REVENUE RECEIVED FROM GAME AND FISHERIES DURING THE YEAR ENDED OCTOBER 31ST, 1920.

Rondeau Park	$90 19	
Royalty Coupons (Beaver and Otter)	57,462 97	
Royalty on furs	36,940 27	
Trappers' licenses	75,223 54	
Non-resident hunting licenses	19,346 50	
Resident deer licenses	52,265 36	
Resident moose licenses	9,119 46	
Fur dealers' licenses	34,850 27	
Tanners' licenses	120 00	
Game dealers' licenses	556 10	
Hotel and restaurant licenses, etc.	248 00	
Cold storage licenses	50 00	
Guides' licenses	1,526 75	
Fines—game	14,246 88	
Sales—fur, etc.	11,086 10	
Fishing licenses	114,359 31	
Fishery royalties	3,255 11	
Angling permits	30,706 85	
Fines—fish	2,805 45	
Sales—fish, twine, etc.	1,688 02	
Miscellaneous	603 73	
	$466,550 86	$466,550 86

GOVERNMENT FISH.

Sales of fish, etc.	$353,214 85	$353,214 85
Total	$819,765 71	$819,765 71

D. McDonald, Esq.,

Deputy Minister of Game and Fisheries,

Toronto, Ont.

Dear Sir,—I have pleasure in handing you herewith a financial report of the Sales Branch for the fiscal year ending October 31st, 1920, by which you will note that there has been a surplus of cash received over expenditures amounting to $100,984.94.

The total fish purchased for the fiscal year amounts to 2,268,601 lbs., as against 3,155,902 lbs. of the previous year and the municipalities supplied during the past year being 94, with 214 dealers, against 106 municipalities and 218 dealers for the previous year. The reduction in production is accounted for by the restrictions placed on the source of supply, as no part of the licensed fishermen's catch was taken, and all operations were confined to contracts placed direct with fishermen at Lakes Nipissing and Nipigon, aside from a small percentage of fish taken in other waters during the spawning operations.

All of which is respectfully submitted.

Yours truly,

(Sgd.) Geo. H. Rapsey,

Superintendent.

Sales Branch.

Income and Expenditure for year ending October 31st, 1920.

Income.

Cash, paid treasurer		$353,214 85

Expenditure.

Paid fishermen	$144,983 55	
Express, freight and cartage	47,771 08	
Boxes and cases	14,988 20	
London and St. Thomas warehouse, charges	2,433 42	
Toronto warehouse, charges	8,858 70	
Wages, packing and shipping, Macdiarmid	8,764 12	
Salaries, Macdiarmid	2,100 00	
Salaries, Toronto warehouse	4,762 26	
Salaries, Toronto office	1,025 67	
Commission, purchasing	687 24	
Travelling expenses	233 94	
Sundry expense, Macdiarmid	1,908 89	
Sundry expense, Toronto	152 94	
Ice	2,867 37	
Postage and stationery	1,125 69	
Buildings, docks, warehouse, etc., Macdiarmid	6,907 16	
Equipment and supplies, Macdiarmid	342 29	
Horses, motor and motor boat expense	1,446 57	
Telephone and telegraph	281 68	
Advertising	40 00	
Miscellaneous expense	549 14	
	$252,229 91	
Surplus cash in treasury over expenditures	100,984 94	
		$353,214 85

WATERS STOCKED.

WITH QUANTITIES AND KINDS OF FISH PLANTED IN EACH IN 1920.

Black Bass Fingerlings distributed from Ponds at Mount Pleasant.

Waters Stocked.	County.	Quantity.
River Thames and Tributaries	Middlesex	70,000
Mississippi Lake	Carleton	20,000
Cedar Creek	Oxford	10,000
Currie's Pond	Middlesex	10,000
Water Works Dam	Dundas	20,000
Kennington Pond	Halton	30,000
Lake Couchiching	Simcoe	20,000
Lake Simcoe	do	20,000
Lake Joseph	Muskoka	20,000
Lake Rosseau	do	20,000
Lake Muskoka	do	20,000
Lake at Huntsville	do	40,000
Clear Lake	Peterboro	20,000
Stony Lake	do	20,000
Rondeau Bay	Kent	20,000
Jackson's Point	Simcoe	10,000
Cameron Lake	Victoria	10,000
Crow Bay	Northumberland	10,000
Pond Mills	Middlesex	5,000
Twin and Crow Lakes	Hastings	10,000
Severn River	Simcoe	20,000
Provincial Museum	(Fingerlings)	200
Credit River	Peel	2,000
Total		427,000
Parent Black Bass at Orient Bay		240
Parent Black Bass in Smith Lake at Kenora		220
Total		460

Speckled Trout Distributed from Mount Pleasant Hatchery.

Waters Stocked.	County.	Quantity.
Kent and Patterson Creeks	Norfolk	20,000
Bickle's Creek	Waterloo	5,000
Rocky Saugeen	Durham	10,000
Little Saugeen	Wellington	10,000
Beaver River	Grey	10,000
Fairy Lake	Halton	25,000
Mill Creek	Waterloo	12,000
Trout Creek	Wentworth	10,000
River Wye	Middlesex	10,000
Clear and Weaver Creeks	Norfolk	5,000
Purvis Lake	Bruce	10,000
Charlston Creek	Frontenac	10,000
Beaver Creek	Wentworth and Wellington	40,000
Cavanville Creek	Durham	5,000
Strong's Creek	Northumberland	10,000
Plato Creek	Peterboro	5,000
Bowan's Creek	do	5,000
Cook's Creek	do	5,000
Sedgrick's Creek	do	5,000
Marsh's Creek	Middlesex	2,500
Reist's and Groff's Creeks	Waterloo	7,000
Creek flowing in Grand River	do	4,000
Dolphin Creek	Grey	4,000
Sydenham Creek	do	4,000
Silver Creek	Bruce	4,000
Maitland and Conestoga	Perth	4,000
Calendon Lake	Dufferin	5,000

Waters Stocked.	County.	Quantity.
Rocky Saugeen River	Grey	5,000
Coldwater River	Simcoe	2,000
Vint's Creek	do	2,000
Mill Creek	Waterloo and Wellington	2,000
Upper Waters of Ouse	Peterboro	10,000
Riverdale Park	Toronto	200
Sixteen Mile Creek	Halton	5,000
Wassagawaga Creek	Peel	4,000
		276,700

Speckled Trout Fry Distributed from Normandale Hatchery.

Waters Stocked.	County.	Quantity.
Millgrove Creek	Wentworth	2,000
Grindstone Creek	do	3,000
Dorchester Dam	Middlesex	5,000
		10,000

Salmon Trout Fry Distributed from Port Arthur Hatchery.

Waters Stocked.	County.	Quantity.
Lake Nipigon	Thunder Bay	734,000
Lake Shebandawan	do	200,000
Long Lake	do	200,000
		1,134,000

Salmon Trout Fry Distributed from Thurlow Hatchery.

Waters Stocked.	County.	Quantity.
Gould Lake	Frontenac	30,000
Charlton Lake	Leeds	60,000
Horseshoe Lake	Hastings	20,000
Eagle Lake	do	30,000
Rideau Lake	Leeds	60,000
		200,000

Pickerel Fry Distributed from Port Carling Hatchery.

Waters Stocked.	County.	Quantity.
Severn River	Muskoka	200,000
McKaye Lake	do	200,000
Nipissing Lake	Nipissing	500,000
Trout Lake	Algoma	200,000
Sparrow Lake	Muskoka	500,000
Lake Rosseau	do	1,000,000
Lake Joseph	do	1,000,000
Lake Muskoka	do	1,150,000
Gull Lake	do	50,000
Silver Lake	do	50,000
		4,850,000

Pickerel Fry Distributed from Fort Frances Hatchery.

Waters Stocked.	County.	Quantity.
Moses Bay	Rainy River	6,560,000
Stangiomain Bay	do	6,020,000
Cascade Falls	do	4,620,000
Inlet Bay	do	4,130,000
Porter's Inlet	do	3,120,000
Big Canoe River	do	1,730,000
		26,180,000

Pickerel Fry Distributed from Thurlow Hatchery.

Waters Stocked.	County.	Quantity.
Eagle Lake	Hastings	150,000
Loughboro Lake	Leeds	150,000
Charleston Lake	do	150,000
		450,000

Whitefish Fry Distributed from Port Arthur Hatchery.

Waters Stocked.	County.	Quantity.
Lake Nipigon	Thunder Bay	8,943,000
Lake Wabigoon	Kenora	500,000
Long Lake	Thunder Bay	500,000
Lake Shebandawan	do	500,000
Lake Kashabowie	do	500,000
Whitefish Lake	do	500,000
Little Long Lake	do	500,000
		11,943,000

Whitefish Fry Distributed from Normandale Hatchery.

Waters Stocked.	County.	Quantity.
Lake Ontario	Wentworth (Hamilton Beach).	140,000
Lake Ontario	do	140,000
Lake Erie	Vicinity Long Point and Normandale	31,112,000
		31,392,000

Herring Fry Distributed from Normandale Hatchery.

Waters Stocked.	County.	Quantity.
Lake Erie	Vicinity Long Point and Normandale	920,000
Total distribution		77,783,360

1920

Bass Fingerlings			427,200
Parent Bass			460
Speckled Trout	Mount Pleasant Hatchery	276,700	
	Normandale Hatchery	10,000	
			286,700
Salmon Trout	Port Arthur Hatchery	1,134,000	
	Thurlow Hatchery	200,000	
			1,334,000
Pickerel	Port Carling Hatchery	4,850,000	
	Fort Frances Hatchery	26,180,000	
	Thurlow Hatchery	450,000	
			31,480,000
Whitefish	Port Arthur Hatchery	11,943,000	
	Normandale Hatchery	31,392,000	
			43,335,000
Herring	Normandale Hatchery		920,000
			77,783,360

Comparative Statement of Distribution.

	1919	1920
Black Bass Fingerlings	200,500	427,200
Parent Black Bass	548	460
Speckled Trout	20,600	286,700
Salmon Trout	1,050,100	1,334,000
Pickerel Fry	2,550,000	31,480,000
Whitefish Fry	7,740,000	43,335,000
Herring Fry	10,800,000	920,000
	22,361,748	77,783,360

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the industry during the year 1919, in the Public

	Districts.	Fishing material.											
		Tugs.				Gasoline Launches.			Sail or Row Boats.			Gill-Nets.	
		No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
	Kenora and Rainy River.			$			$			$			$
1	Lake of the Woods	1	12	2,000	3	38	14,975	66	35	1,457	24	50,100	10,284
2	Eagle, Shoal, Stormy, Manitou and Sturgeon Lakes	1	9	1,200	2	13	5,550	21	5	170	2	19,750	3,825
3	Rowan, Indian, Deception, Feegan and Big Sandy Lakes	....	.....	.....	.....	2	850	3	3	208	2	7,500	1,750
4	Scotch, Obabicon, Whitefish, Dogtooth, Bear and Wabigoon Lakes	1	5	500	2	4	1,472	5	4	110	6	10,800	1,940
5	Minnetakie, Sandy, Otter, Star, Clay and Kawæogama Lakes	....	.....	.....	.....	2	750	3	3	250	4	9,300	1,300
6	Big Vermillion, Lac Seul, Rock, Pelican and Lake of Bays Lakes	....	.....	.....	.....	1	250	2	5	450	6	5,450	628
7	Rainy Lake	1	4½	500	3	26	11,450	49	23	1,070	20	36,964	6,399
8	Six Mile, Sanford, Jackfish, Tuttle and Mainville Lakes	....	.....	.....	.....	1	600	1	3	175	10	6,000	1,290
9	Loon, Kairskons, Big Saw Mill and Pipestone Lakes	....	.....	.....	.....	.....	.....	.....	3	125	7	6,500	975
10	Sand Point, Namican, Trout, Clearwater and White Otter Lakes	....	.....	.....	.....	2	900	5	4	350	13	12,500	2,425
	Totals	4	30½	4,200	10	89	36,797	155	88	4,365	94	164,864	30,816

Return of the kinds, quantities and values of fish caught during the

	Districts.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel or Dore.
	Kenora and Rainy River.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Lake of the Woods	.....	.....	.....	178,164	.....	14,855	317,353	394,031
2	Eagle, Shoal, Stormy, Manitou and Sturgeon Lakes	.....	.....	.....	141,335	.....	18,461	38,433	105,484
3	Rowan, Indian, Feegan, Deception and Big Sandy Lakes	.....	.....	.....	20,350	.....	10,000	450	21,345
4	Scotch, Obabicon, Whitefish, Dogtooth, Bear and Wabigoon Lakes	.....	.....	1,100	21,544	50	1,435	11,590	19,498
5	Minnetakie, Sandy, Otter, Star, Clay and Kawæogama Lakes	.....	.....	.....	13,504	.....	1,150	9,177	37,894
6	Big Vermillion, Lac Seul, Rock, Pelican and Lake of Bays Lakes	.....	.....	.....	27,122	.....	20,055	6,852	8,558
7	Rainy Lake	.....	.....	.....	56,339	.....	1,000	226,229	210,615
8	Six Mile, Sanford, Jackfish, Tuttle and Mainville Lakes	.....	.....	.....	2,972	.....	3,000	7,021	5,415
9	Loon, Kairskons, Big Saw Mill and Pipestone Lakes	.....	.....	.....	9,737	.....	5,456	6,036	3,714
10	Sand Point, Namican, Trout, Clearwater and White Otter Lakes	.....	.....	.....	25,376	.....	15,395	12,203	30,495
	Totals	.....	.....	1,100	496,483	50	90,807	635,404	837,049
	Values	.....	$ c.	$ c. 110 00	$ c. 49,648 30	$ c. 5 00	$ c. 9,080 70	$ c. 31,770 20	$ c. 83,704 90

FISHERIES.

quantity and value of all fishing materials and other fixtures employed in the fishing Waters of Kenora and Rainy River Districts.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound nets.		Hoop nets.		Dip or roll nets.		Night lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
....	.....	.....	32	13,000	39	2,920	....	.....	.....	.....	....	.....	20	8,940	23	1,995
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	9	2,025	10	1,650
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	2	200	2	300
....	.....	.....	....	.....	6	400	....	.....	.....	.....	....	.....	4	720	4	505
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	7	1,050	2	100
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	5	850	3	175
....	.....	.....	31	10,560	....	.....	....	.....	.....	.....	....	.....	19	5,035	7	900
....	.....	.....	....	.....	2	175	....	.....	.....	.....	....	.....	....	.....	....	.....
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	1	15	....	.....
....	.....	.....	7	3,500	....	.....	....	.....	.....	.....	....	.....	1	150	1	50
....	.....	.....	70	27,060	47	3,495	....	.....	.....	.....	....	.....	68	18,985	52	8,675

year 1919, in the Public Waters of Kenora and Rainy River Districts.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
8,310	.....	.....	80,779	70,754	53,232	82,922	60	.....	.....	91,583 07
.....	.....	.....	5,148	.....	.....	300	.....	.....	.....	28,770 53
.....	.....	.....	.....	.....	.....	2,950	.....	.....	.....	5,314 00
.....	.....	.....	540	6,000	.....	700	.....	.....	.....	5,482 60
.....	.....	.....	4,549	.....	.....	.....	.....	.....	.....	5,986 59
.....	.....	.....	.....	.....	.....	7,367	.....	.....	.....	6,210 78
2,666	.....	9,717	140,325	.....	.....	145,219	189	.....	.....	53,621 39
200	.....	.....	900	.....	.....	10,850	20	.....	.....	2,021 75
.....	.....	.....	584	.....	.....	4,664	.....	.....	.....	2,417 10
3,140	.....	.....	8,438	.....	.....	5,000	.....	.....	.....	8,819 83
14,316	.....	9,717	241,263	76,754	53,232	259,972	269	.....	.....	210,227 64
$ c. 1,717 92	$ c.	$ c. 777 36	$ c. 14,475 78	$ c. 6,140 32	$ c. 2,129 28	$ c. 10,398 88	$ c. 269 00	$ c.	$ c.	$ c. 210,227 64

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1919,

Districts.	Fishing Material.											
	Tugs.				Gasoline Launches			Sail or Row Boats.			Gill-Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
Lake Superior.			$			$			$			$
1 Thunder Bay	7	212	24,200	95	4	2,050	10	13	2,600	20	265,500	25,170
2 Pigeon River to Sturgeon Point and Whitefish Lake	....	.....	.....	.....	1	500	4	7	500	9	11,700	2,059
3 Black Bay and Point Magnet	1	18	3,000	4	1	1,800	3	6	830	10	39,500	2,255
4 Evelyn, Lamb, Spar and Shaganash Islands	....	.....	.....	.....	2	750	3	3	290	3	18,000	1,625
5 Rossport, Pays Platte Bay and Wilson Island	6	112	19,000	15	1	1,200	7	4	610	5	157,500	31,100
6 Jackfish, Port Coldwell, McKay and Twin Lakes	....	.....	.....	.....	5	1,200	10	3	170	5	20,500	2,040
7 Kashabowie, Sturgeon, Heath ote, Shebandowan Head and Greenwater Lakes	....	.....	.....	.....	3	850	5	4	225	5	8,000	1,600
8 Lake Nipigon	6	145	25,500	48	6	5,300	19	1	125	.....	75,500	11,480
9 Gros Cap, Goulais Bay and Wawa Lake	....	.....	.....	.....	7	2,750	14	13	1,660	20	65,700	6,320
10 Batchawana Bay, Parisienne and Sandy Island	1	21	4,000	5	3	2,000	8	4	250	7	46,400	6,240
11 Gargantau and Mamainse Point	1	36	5,000	5	3	2,700	10	2	110	3	93,500	12,105
12 Michipicoten and Richardson's Harbour	3	103	19,000	26	4	2,500	11	....	.....	.....	134,000	15,150
Totals	25	647	99,700	198	43	23,600	104	60	7,370	87	935,800	117,144

Return of the kinds, quantities and values of fish caught

Districts.	Herring, salted.	Herring, fresh.	Whitefish, salted	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel, or Dore.
Lake Superior.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Thunder Bay	480,600	1,488,610	2,250	86,667	1,883	255,225	4,615	14,500
2 Pigeon River to Sturgeon Point and Whitefish Lake	61,750	9,700	.....	32,136	500	16,210	160	1,490
3 Black Bay, and Point Magnet	.....	.....	.....	52,949	355	13,330	5,056	62,582
4 Evelyn, Lamb, Spar and Shaganash Islands	.....	.....	.....	5,150	200	37,866	75	275
5 Rossport, Pays Platte Bay and Wilson Island	.....	.....	.....	34,500	500	350,015	200	1,000
6 Jackfish, Port Coldwell, McKay and Twin Lakes	.....	.....	.....	14,900	200	56,900	850	9,200
7 Kashabowie, Sturgeon, Heathcote, Shebandowan Head and Greenwater Lakes	.....	.....	600	46,065	.....	15,921	6,460	10,018
8 Lake Nipigon	.....	.....	.....	1,620,970	.....	617,900	1,080	30,035
9 Gros Cap, Goulais Bay, and Wawa Lake	.....	9,172	.....	42,298	300	141,407	399	1,551
10 Batchawana Bay, Parisienne and Sandy Island	.....	675	600	62,350	.....	87,450	56	2,474
11 Gargantau and Mamainse Point	.....	.....	.....	13,794	700	93,538	.....	6,908
12 Michipicoten and Richardson's Harbour	.....	.....	.....	17,920	140,000	274,460	29	933
Totals	545,350	1,508,157	3,150	2,029,699	144,638	1,960,222	18,989	140,966
Values	$ c. 27,267 50	$ c. 75,107 85	$ c. 345	$ c. 202,969 90	$ c. 14,463 80	$ c. 196,022 20	$ c. 949 00	$ c. 14,096 60

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Superior.

Fishing Material.													Other fixtures used in fishing.			
Seines.			Pound Nets.		Hoop Nets.		Dip or Roll Nets.		Night Lines		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
....	.....	.....	2	1,000	....	.....	....	.....	.....	.....	....	.....	5	12,300	4	1,100
....	.....	.....	1	250	....	.....	....	.....	.....	.....	....	.....	1	50	3	1,000
....	.....	.....	5	3,000	....	.....	....	.....	.....	.....	....	.....	2	900	3	200
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	....	.....	1	100
....	.....	.....	10	4,000	....	.....	....	.....	.....	.....	....	.....	3	1,800	4	850
....	.....	.....	3	975	....	.....	....	.....	.....	.....	....	.....	2	275	1	25
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	1	25	....	.....
....	.....	.....	10	2,500	10	350	....	.....	.....	.....	....	.....	....	.....	....	.....
....	.....	.....	3	1,500	....	.....	....	.....	.....	.....	....	.....	2	320	2	700
....	.....	.....	9	9,000	....	.....	....	.....	.....	.....	....	.....	3	2,000	2	1,500
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	1	300	2	2,500
....	.....	.....	12	8,000	....	.....	....	.....	.....	.....	....	.....	4	3,200	3	2,500
....	.....	.....	55	30,225	10	350	....	.....	.....	.....	....	.....	24	21,170	25	10,575

during the year 1919, in the Public Waters of Lake Superior.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare	Sturgeon bladders.	Pickerel (blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
.....	.....	.....	.....	.....	.....	62,100	.....	.....	.....	137,227 75
.....	.....	.....	.....	.....	.....	98	.....	.....	.....	8,768 02
81	.....	.....	.....	.....	.....	58,757	.....	.....	.....	15,534 40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,352 85
.....	.....	.....	.....	.....	.....	718	.....	.....	.....	3[illegible],640 22
75	.....	.....	.....	.....	.....	4,800	.....	.....	.....	8,363 50
.....	.....	.....	440	.....	.....	900	.....	.....	.....	7,645 80
17,595	.....	.....	400	.....	.....	.....	140	.....	.....	229,219 90
3,037	.....	.....	.....	.....	.....	266	12	.....	.....	19,421 23
156	.....	.....	.....	.....	.....	575	.....	.....	.....	15,365 67
.....	.....	.....	.....	.....	.....	21,643	.....	.....	.....	12,352 72
975	.....	.....	.....	.....	.....	140,360	.....	.....	.....	49,064 1[illegible]
21,919	.....	.....	840	.....	.....	290,217	152	.....	.....	545,963 21
$ c. 2,630 28	$ c.	$ c.	$ c. 50 40	$ c.	$ c.	$ c. 11,608 68	$ c. 152 00	$ c.	$ c.	$ c. 545,963 21

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1919, in the

District.	Fishing material.											
	Tugs.				Gasoline Launches.			Sail or Row Boats.			Gill-Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value
Lake Huron, North Channel			$			$			$			$
1 Bruce Mines, St. Joseph's Island and Cedar Island	....	.....	.....	.....	1	300	2	5	330	7	9,800	760
2 Thessalon	....	.....	.....	.....	4	2,100	8	7	360	8	31,000	3,000
3 Mississauga River, Blind River, Algoma Mills and Spragge	1	23	5,000	6	3	1,750	8	4	325	2	5,200	630
4 Spanish, Cutler, John's Island and Bay of Islands	3	55	11,900	11	6	3,500	10	13	635	11	20,500	2,460
5 Pakowkami, Laugon, Gordon, Echo and Chibleau Lakes	....	.....	.....	.....	....	.....	.....	5	285	8	7,500	655
6 Long, Little Laloche, Dollar, Pecord and Crooked Lakes	....	.....	.....	.....	....	.....	.....	6	320	6	6,500	650
7 Mississauga Straits, Cockburn and Duck Islands	5	166	40,000	28	....	.....	.....	1	50	2	215,000	20,300
8 Providence and South Bays, Fitzwilliam Island	3	79	14,000	17	2	1,200	8	4	345	6	166,270	13,786
9 Killarney, Squaw Island and Wekwemikong Bay	4	106	20,000	19	12	7,050	21	3	125	4	212,400	17,460
10 Manitowaning and Sheguindah Bays, Lake Manitou and Laloche Island	....	.....	.....	.....	2	2,000	6	1	100	2	4,000	400
11 Little Current, Kagawong and Mindemoya	1	20	2,000	4	2	5,600	6	2	35	2	61,800	3,260
12 Gore Bay, Meldrum Bay and Berry Island	3	71	15,500	14	....	.....	.....	4	400	3	122,500	12,400
Totals	20	520	108,400	99	32	23,600	72	55	3,310	61	862,470	75,761

Return of the kinds, quantities and values of fish caught during

District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel, or Dore.
Lake Huron, North Channel	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Bruce Mines, St. Joseph's Island and Cedar Island	40	350	248	8,358	200	8,058	6,905	3,235
2 Thessalon	.....	1,275	.....	13,820	.....	38,747	15,958	2,704
3 Mississauga River, Blind River, Algoma Mills and Spragge	.....	1,091	.....	32,202	.....	20,650	3,106	18,687
4 Spanish, Cutler, John's Island and Bay of Islands	229	19,183	.....	6,924	600	12,957	86,959	105,108
5 Pakowkami, Laugon, Gordon, Echo and Chibleau Lakes	.....	2,200	.....	1,260	.....	1,670	1,260	490
6 Long, Little Laloche, Dollar, Pecord and Crooked Lakes	.....	1,511	.....	661	.....	1,920	5,200	2,979
7 Mississauga Straits, Cockburn and Duck Islands	.....	.....	.....	114,083	8,250	808,108	6	90
8 Providence and South Bays, Fitzwilliam Island	.....	.....	500	39,355	1,300	236,462	700	276
9 Killarney, Squaw Island and Wekwemikong Bay	.....	.....	100	137,798	.....	371,806	19,768	21,048
10 Manitowaning and Sheguindah Bays, Lake Manitou and Laloche Island	2,600	.....	.....	8,019	.....	8,475	10,736	23,287
11 Little Current, Kagawong and Mindemoya	.....	2,693	.....	37,443	.....	9,555	5,276	16,800
12 Gore Bay, Meldrum Bay and Berry Island	.....	.....	.....	69,113	200	77,500	1,765	700
Totals	2,869	28,506	848	799,336	10,550	1,595,608	160,639	225,404
Values	$ c. 113 45	$ c. 1425 30	$ c. 84 80	$ c. 79,933 60	$ c. 1,055 00	$ c. 159,560 80	$ c. 8,031 95	$ c. 22,540 40

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the Public Waters of Lake Huron, North Channel.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound nets.		Hoop nets.		Dip or roll nets.		Night lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
....	.....	.....	2	600	2	60	....	.....	.....	.....	....	.....	3	325	1	100
....	.....	.....	9	2,900	....	.....	....	.....	.....	.....	....	.....	4	1,200	....	.....
....	.....	.....	17	7,500	1	50	....	.....	.....	.....	....	.....	3	1,400	3	4,400
....	.....	.....	33	11,450	3	150	....	.....	.....	.....	....	.....	10	2,500	6	4,200
....	.....	.....	....	.....	2	80	....	.....	.....	.....	....	.....	2	200	....	.....
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	1	100	....	.....
....	.....	.....	23	21,000	....	.....	....	.....	.....	.....	....	.....	2	1,000	3	1,100
....	.....	.....	8	8,000	....	.....	....	.....	.....	.....	....	.....	2	1,000	2	1,000
....	.....	.....	43	39,100	....	.....	....	.....	.....	.....	....	.....	2	1,600	2	1,050
....	.....	.....	9	3,400	....	.....	....	.....	.....	.....	....	.....	1	500	1	350
....	.....	.....	18	8,950	....	.....	....	.....	.....	.....	....	.....	4	3,250	4	26,800
....	.....	.....	13	6,000	....	.....	....	.....	.....	.....	....	.....	2	1,500	3	3,000
....	.....	.....	175	108,900	8	340	....	.....	.....	.....	....	.....	36	14,575	25	42,000

the year 1919, in the Public Waters of Lake Huron, North Channel.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and Coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (Blue).	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
129	.....	950	.....	200	130	7,425	2	.....	.....	2,796 33
201	.....	4,870	.....	.....	100	34,933	.....	.....	.....	11,296 55
1,823	.....	.....	.....	24	.....	66,898	50	.....	.....	10,310 50
4,159	.....	1,824	.....	.....	.....	168,180	.....	.....	.....	25,249 65
.....	.....	1,110	.....	.....	.....	1,420	.....	.....	.....	933 00
.....	.....	.....	.....	.....	600	11,666	.....	.....	.....	1,382 19
130	.....	.....	14,202	.....	30	.....	.....	.....	.....	93,922 32
.....	.....	.....	11,794	.....	.....	8,200	.....	.....	.....	28,859 94
681	.....	236	.....	887	155	11,079	27	.....	.....	84,831 52
528	.....	.....	.....	.....	.....	5,105	.....	.....	.....	1,882 46
5,681	.....	2,560	.....	.....	.....	15,931	7	.....	.....	11,309 37
185	.....	.....	.....	.....	.....	13,858	.....	.....	.....	15,416 27
13,523	.....	11,580	25,996	1,111	1,020	350,755	86	.....	.....	291,130 10
$ c. 1,622 76	$ c.	$ c. 926 40	$ c. 1,559 76	$ c. 88 88	$ c. 40 80	$ c. 14,020 20	$ c. 86 00	$ c.	$ c.	$ c. 291,130 10

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the industry during the year 1919

District.	Fishing material.											
	Tugs.				Gasoline Launches.			Sail or Row Boats			Gill-Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
Georgian Bay.			$			$			$			$
1 Byng Inlet	2	52	11,000	8	3	5,200	8	6	330	13	63,800	12,895
2 Parry Sound	3	46	16,000	16	10	5,275	16	4	425	5	203,824	19,820
3 Waubaushene	....	.....	.....	.....	....	.....	.....	12	1,075	14	25,000	3,415
4 Penetanguishene	....	.....	.....	.....	4	825	8	5	195	9	23,380	1,251
5 Collingwood	2	34	11,000	10	11	4,050	21	7	355	14	174,600	12,493
6 Meaford to Owen Sound Bay	6	158	25,500	26	28	12,315	65	18	1,025	31	273,900	21,195
7 Colpoy's Bay to Tobermory	3	53	9,200	14	17	14,425	37	12	985	19	150,600	13,972
Totals	16	343	72,700	74	73	42,090	155	64	4,390	105	915,104	85,041

Return of the kinds, quantities and values of fish caught

District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh	Pike.	Pickerel or Dore.
Georgian Bay.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Byng Inlet	.....	.....	7,950	160,091	.....	51,980	3,888	54,909
2 Parry Sound	.....	500	.....	173,451	700	112,353	9,681	10,265
3 Waubaushene	200	100	.....	3,129	.....	200	14,113	11,655
4 Penetanguishene	2,000	11,400	900	10,915	2,000	14,300	200	.....
5 Collingwood	300	33,450	400	25,620	1,300	126,126	400	.....
6 Meaford to Owen Sound Bay	2,500	2,900	.....	844	12,800	335,293	36	.....
7 Colpoy's Bay to Tobermory	600	12,520	400	16,958	9,500	258,165	23	.....
Totals	5,600	60,870	9,650	391,008	26,300	898,417	28,341	76,839
Value	$ c. 280 00	$ c. 3,043 50	$ c. 965 00	$ c. 39,100 80	$ c. 2,630 00	$ c. 89,841 70	$ c. 1,417 05	$ c. 7,683 90

FISHERIES.

quantity and value of all fishing materials and other fixtures employed in the fishing in the Public Waters of Georgian Bay.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound Nets.		Hoop nets.		Dip or Roll Nets.		Night Lines.		Spears		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
....	.....	.....	12	12,600	....	.....	....	.....	.....	.....	....	.....	1	2,000	1	1,000
....	.....	.....	4	2,000	....	.....	....	.....	3,600	72	....	.....	1	1,500	2	1,100
1	75	100	....	.....	19	410	....	.....	.....	.....	....	.....	1	150	1	100
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	3	170	3	700
4	1,000	1,095	....	.....	....	.....	....	.....	2,300	74	....	.....	....	.....	....	.....
....	.....	.....	....	.....	....	.....	....	.....	8,500	1,465	....	.....	6	825	4	450
....	.....	.....	7	3,700	....	.....	....	.....	9,100	1,200	....	.....	8	1,700	10	1,500
5	1,075	1,195	23	18,300	19	410	....	.....	23,500	2,811	....	.....	20	6,345	21	4,850

during the year 1919, in the Public Waters of Georgian Bay.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
1,057	....	.....	....	.....	73	16,500	.....	.....	.....	28,477 16
121	....	41	....	13	23	.....	.....	.....	.....	30,205 71
.....	.....	6,000	.....	4,875	13,295	45,232	.....	.....	200	5,443 13
.....	.....	.....	300	.....	....	.....	.....	.....	.....	3,509 50
600	....	.....	.....	.....	46,600	5,500	.....	.....	.....	18,968 10
....	50	35	7,050	60	.....	143	....	.. ....	.....	35,606 82
.....	....	....	46,434	.....	525	13,902	.....	.....	.....	32,522 57
1,778	50	6,076	53,784	4,948	54,516	81,277	.....	.....	200	154,732 99
$ c. 213 36	$ c. 5 00	$ c. 486 08	$ c. 3,227 04	$ c. 395 84	$ c. 2,180 64	$ c. 3,251 08	$ c.	$ c.	$ c. 12 00	$ c. 154,732 99

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1919.

District.	Fishing material.											
	Tugs.				Gasoline Launches.			Sail or Row Boats.			Gill-Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
Lake Huron (Proper).			$			$			$			$
1 Tobermory to Southampton	9	210	36,500	47	14	8,200	34	12	2,165	22	460,300	32,995
2 Southampton to Pine Point	1	17	5,000	6	3	4,000	12	2	100	4	91,000	10,875
3 County of Huron	....	.....	.....	.....	17	7,040	32	....	.....	.....	96,500	8,725
4 County of Lambton (including River St. Clair)	....	.....	.....	.....	27	9,730	45	21	845	23	.....	.....
Totals	10	227	41,500	53	61	28,970	123	35	3,110	49	647,800	52,595

Returns of the kinds, quantities and values of fish caught

District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel, or Dore.
Lake Huron (Proper).	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Tobermory to Southampton	8,000	42,800	6,800	28,161	48,200	581,144	1,958	2,202
2 Southampton to Pine Point	.....	650	.....	200	1,200	141,599	.....	300
3 County of Huron	.....	12,952	.....	9,640	2,150	90,127	100	18,704
4 County of Lambton (including River St. Clair)	.....	86,615	.....	52,618	....	14,852	1,275	161,356
Totals	8,000	143,017	6,800	90,619	51,550	827,722	3,333	182,562
Values	$ c. 100 00	$ c. 7,150 85	$ c. 680 00	$ c. 9,061 90	$ c. 5,155 00	$ c. 82,772 20	$ c. 166 65	$ c. 18,256 20

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Huron (Proper).

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound nets.		Hoop nets.		Dip or Roll Nets.		Night Lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
....	.....	.....	2	500	....	.....	....	.....	3,900	325	....	.....	7	2,730	2	500
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	....	.....	2	700	....	.....
....	.....	.....	10	4,500	....	.....	....	.....	.....	.....	....	.....	9	1,100	....	.....
5	295	350	52	29,200	....	.....	4	49	1,000	150	....	.....	4	1,825	....	.....
5	295	350	64	34,200	....	.....	4	49	4,900	475	....	.....	22	6,355	2	500

during the year 1919, in the Public Waters of Lake Huron (Proper).

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon bladders.	Pickerel (blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs	lbs.	lbs.	lbs.	No.	lbs.	$ c.
51	.....	4,423	148,618	.....	200	19,698	.....	.....	.....	79,361 56
.....	.....	.....	11,437	.....	.....	.....	.....	.....	.....	15,048 62
1,308	.....	56,476	10,110	.....	.....	29,756	40	.....	.....	19,226 58
9,735	25	6,570	.....	383	6,710	55,860	983	.....	550	32,522 84
11,094	25	67,469	170,165	383	6,910	105,314	1,023	.....	550	146,159 60
$ c. 1,331 28	$ c. 2 50	$ c. 5,397 52	$ c. 10,209 90	$ c. 20 64	$ c. 276 40	$ c. 1,212 56	$ c. 1,023 00	$ c.	$ c. 33 00	$ c. 146,159 60

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1919,

	District.	Fishing material.											
		Tugs.				Gasoline Launches.			Sail or Row Boats.			Gill-Nets.	
		No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
	Lake St. Clair.			$			$			$			$
1	Kent County (including River Thames)	.....	.....	.....	.....	40	15,100	73	60	4,233	125	.....	.....
2	Essex County	.....	.....	.....	.....	30	6,325	54	50	2,030	66	.....	.....
3	Detroit River	.....	.....	.....	.....	5	1,850	15	26	800	47	.....	.....
	Totals	.....	.....	.....	.....	75	23,275	142	136	7,063	238	.....	.....

Return of the kinds, quantities and values of fish caught

	District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel or Dore.
	Lake St. Clair.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Kent County (including River Thames)	.....	.....	.....	.....	.....	.....	29,570	26,194
2	Essex County	.....	.....	.....	10,300	.....	.....	3,075	32,700
3	Detroit River	.....	.....	.....	3,000	.....	.....	5,590	1,425
	Totals	.....	.....	.....	13,300	.....	.....	38,235	60,319
	Values	$ c.	$ c.	$ c.	$ c. 1,330 00	$ c.	$ c.	$ c. 1,911 75	$ c. 6,031 90

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake St. Clair, etc.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound nets.		Hoop nets.		Dip or Roll Nets.		Night Lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
37	6,800	5,981	....	.....	105	11,850	....	.....	2,600	23	....	.....	29	9,925	11	2,200
20	5,400	3,300	7	2,900	87	8,500	....	.....	3,200	395	....	.....	9	3,840	....	.....
25	4,023	2,535	....	.....	....	.....	....	.....	.....	.....	....	.....	....	.....	....	.....
82	16,223	11,816	7	2,900	192	20,350	....	.....	5,800	418	....	.....	38	13,765	11	2,200

during the year 1919, in the Public Waters of Lake St. Clair, etc.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon bladders	Pickerel (Blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
.....	.....	87,787	.....	42,935	160,720	279,512	.....	.....	.....	32,164 94
10,800	.....	50,350	.....	30,200	75,100	252,000	478	.....	.....	25,755 75
.....	.....	2,010	.....	670	58,620	5,750	.....	.....	500	3,541 20
10,800	.....	140,147	.....	73,805	294,440	537,262	478	.....	500	61,461 89
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,296 00	.....	11,211 76	.....	5,904 40	11,777 60	21,190 48	478 00	.....	30 00	61,461 89

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the fishing industry during the year 1919,

District.	Fishing material.											
	Tugs				Gasoline Launches.			Sail or Row Boats.			Gill-Nets.	
	No.	Tonnage.	Value	Men.	No.	Value	Men.	No.	Value.	Men.	Yards.	Value.
Lake Erie.			$			$			$			$
1 Pelee Island	3	119	39,000	18	10	6,200	30	21	910	21	66,300	11,465
2 Essex County	....	.....	.....	.....	41	39,150	88	22	1,095	8	7,000	1,750
3 Kent County, West	2	52	17,000	14	37	26,700	76	16	1,770	2	117,920	15,900
4 Kent County, East	....	.....	.....	.....	19	13,850	69	15	1,235	12	8,500	2,000
5 Elgin County, West	2	69	25,000	13	18	11,025	64	17	1,285	10	158,300	6,885
6 Elgin County, East	20	555	141,565	126	7	5,250	25	....	.....	.....	538,000	89,540
7 Norfolk County	11	298	74,500	68	17	11,350	51	51	2,605	125	235,000	42,870
8 Haldimand County (to and including the Grand River)	8	164	36,800	36	20	12,750	49	29	1,005	15	136,800	20,970
9 Port Maitland to Port Colborne	....	.....	.....	.....	1	300	4	1	25	2	3,000	400
10 Port Colborne to Niagara Falls	....	.....	.....	.....	....	.....	.....	12	510	12	2,100	350
Totals	46	1,257	333,865	275	170	126,575	456	184	10,440	207	1,273,920	192,130

Return of the kinds, quantities and values of fish caught

District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel, or Dore.
Lake Erie.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Pelee Island	.....	122,024	.....	127,973	.....	.....	.....	12,250
2 Essex County	.....	91,815	.....	207,017	.....	.....	1,638	41,586
3 Kent County, West	.....	572,121	.....	207,324	.....	.....	.....	19,173
4 Kent County, East	.....	275,927	.....	36,723	.....	.....	657,486	18,014
5 Elgin County, West	.....	546,779	.....	38,832	.....	.....	426	12,719
6 Elgin County, East	.....	2,171,752	.....	130,762	.....	.....	20,576	32,180
7 Norfolk County	.....	2,108,748	.....	142,418	.....	778	42,733	4,128
8 Haldimand County (to and including the Grand River)	.....	1,512,677	.....	199,922	.....	750	583	3,931
9 Port Maitland to Port Colborne	.....	22,870	.....	3,309	.....	.....	25	342
10 Port Colborne to Niagara Falls	.....	.....	.....	.....	.....	.....	3,570	.....
Totals	.....	7,425,713	.....	1,094,280	.....	1,528	727,037	144,323
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Values	.....	371,285 65	.....	109,428 00	.....	152 80	36,351 85	14,432 30

FISHERIES.

quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Erie.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound Nets.		Hoop Nets.		Dip or Roll Nets.		Night Lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
3	1,200	500	30	16,400	....	.....	....	.....	.....	.....	....	.....	5	6,400	2	400
6	1,630	814	181	159,900	3	50	....	.....	300	10	....	.....	25	23,400	9	1,285
2	150	300	138	111,750	....	.....	....	.....	.....	.....	....	.....	31	62,500	13	6,150
6	2,400	1,200	104	78,106	....	.....	....	.....	.....	.....	....	.....	22	34,200	14	5,850
....	.....	.....	91	72,700	....	.....	....	.....	.....	.....	....	.....	24	12,200	11	14,050
....	.....	.....	43	32,900	....	.....	6	48	400	12	....	.....	11	12,100	9	3,750
33	13,480	7,685	50	24,900	23	570	....	.....	.....	.....	....	.....	15	12,300	13	6,400
9	1,280	895	62	33,400	....	.....	14	120	.....	.....	....	.....	9	4,200	1	800
....	.....	.....	6	2,000	....	.....	....	.....	.....	.....	....	.....	2	250	....	.....
2	100	120	....	.....	....	.....	....	.....	3,700	90	....	.....	....	.....	....	.....
61	19,640	11,544	711	532,050	26	620	20	168	4,400	112	....	.....	144	167,550	72	38,695

during the year 1919, in the Public Waters of Lake Erie.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (Blue).	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.		$ c.
7,919	.....	136,987	.....	2,049	20,128	80,536	536	4	22,952	38,150 34
9,831	.....	94,890	.....	4,924	55,374	282,056	269	.....	437,291	78,701 45
1,624	.....	147,911	.....	95	11,776	82,087	51	.....	879,847	119,887 85
1,019	.....	159,802	.....	253	7,380	44,114	32¼	.....	.....	67,163 04
1,024	.....	120,825	.....	2,188	367	27,856	16	.....	486,967	72,842 21
809	.....	215,290	.....	6,581	509	17,392	87	.....	238,100	158,846 40
4,389	.....	156,021	1,308	17,686	182,119	130,748	319	.....	128,948	157,378 73
14,042	.....	59,654	15	196	98,445	54,112	108	.....	175,985	121,316 62
2,052	.....	3,405	.....	.....	182	13,948	109	.....	12,547	3,455 51
.....	.....	2,150	.....	.....	1,800	20,799	.....	.....	5,150	1,563 46
42,709	.....	1,096,935	1,323	33,972	378,380	793,658	1,827¼	4	2,387,787	819,305 61
$ c.		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
5,125 08	.....	87,754 80	79 38	2,717 76	15,135 20	31,746 32	1,827 25	2 00	143,967 22	819,305 61

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1919,

	District.	Fishing material.											
		Tugs.				Gasoline Launch es			Sail or Row Boats			Gill-Nets.	
		No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value	Men.	Yards.	Value.
	Lake Ontario.			$			$			$		1	$
1	Lincoln County	1	29	5,000	3	20	9,675	36	12	615	19	101,120	9,185
2	Welland County	....	.....	.....	.....	....	.....	.....	1	20	2	.....	.....
3	Wentworth County	....	.....	.....	.....	7	4,450	14	7	500	4	62,000	6,500
4	Halton County	....	.....	.....	.....	6	975	12	15	5,705	30	99,000	6,520
5	Peel County	....	.....	.....	.....	3	1,100	3	1	30	2	10,000	1,200
6	York County	....	.....	.....	.....	7	2,850	13	6	480	8	35,500	3,290
7	Ontario County	....	....	.....	.....	9	2,950	18	2	175	4	33,650	2,870
8	Durham County	1	21	4,000	4	4	2,500	9	1	50	2	60,000	8,305
9	Northumberland County	....	.....	.....	.....	14	5,100	29	30	1,520	47	81,460	7,455
10	Prince Edward County	....	.....	.....	.....	65	21,000	119	142	5,785	228	419,120	30,776
11	Bay of Quinte (Proper)	....	.....	.....	.....	11	1,625	10	156	15,552	276	108,350	15,460
12	Bay of Quinte (Eastern Channel)	....	.....	.....	.....	12	2,925	22	38	1,465	46	92,400	6,296
13	Wolfe Island and Vicinity	....	.....	.....	.....	14	3,725	23	39	1,625	60	36,500	3,265
	Totals	2	50	9,000	7	172	58,875	309	450	33,522	728	1,139,100	101,122

Return of the kinds, quantities and values of fish caught

	District.	Herring, salted.	Herring, fresh.	Whitefish salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel or Dore.
	Lake Ontario.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Lincoln County	.....	106,238	.....	64,220	....	349	.....	18,188
2	Welland County	.....	.....	.....	.....	....	.....	89	16
3	Wentworth County	.....	46,100	.....	46,400	.....	5,850	.....	200
4	Halton County	7,400	122,000	.....	50,500	.....	33,700	.....	.....
5	Peel County	.....	9,000	.....	1,400	.....	16,500	.....	.....
6	York County	.....	5,600	.....	31,525	.....	6,005	.....	.....
7	Ontario County	....	2,716	.....	110,667	.....	2,885	287	....
8	Durham County	.....	3,425	150	84,177	....	5,101	.....	.....
9	Northumberland County	2,130	51,140	.....	106,700	.....	53,400	36,990	.....
10	Prince Edward County	1,150	287,942	1,275	632,516	.....	343,620	42,871	83
11	Bay of Quinte (Proper)	.....	1,045,336	5,200	319,501	.....	130	135,270	19,517
12	Bay of Quinte (Eastern Channel)	100	26,015	.....	118,398	200	53,563	4,727	1,986
13	Wolfe Island and Vicinity	150	3,900	600	20,319	700	31,800	25,861	469
	Totals	10,930	1,709,412	7,225	1,586,333	900	553,203	246,095	40,459
	Values	$ c. 546 50	$ c. 85,470 60	$ c. 722 50	$ c. 158,633 30	$ c. 90 00	$ c. 55,320 30	$ c. 12,304 75	$ c. 4,045 90

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Ontario.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound Nets.		Hoop Nets.		Dip or Roll Nets.		Night Lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
7	533	750	....	....	....	....	....	.....	....	....	....	.....	.....	.....	....	.....
1	90	150	....	.... ..	....	....	2	15 00	.....	.....	....	.....	.....	.....	....	....
....	.....	.....	....	.....	....	.....	....	.....	.....	.....	102	306	104	2,553	....	.....
....	.....	.....	....	.....	....	.....	....	....	400	16 00	....	.....	21	1,955	....	.....
1	20	30	....	....	....	.....	....	....	.....	.....	....	....	1	300	....	.. ....
3	505	200	....	.....	....	.....	....	.....	.....	.....	....	.....	.....	.... ..	....	.....
1	135	175	....	.....	....	.....	....	.....	.....	.....	....	.....	5	325	....	.....
....	....	.....	....	.....	1	20	....	.....	.....	.....	....	.....	1	100	....	.....
....	.....	.....	....	.....	51	1,755	....	.. ....	.....	.....	....	.....	7	360	2	75
2	350	90	....	.....	173	5,675	....	.....	5,075	244 00	....	.....	31	3,815	1	150
....	.....	.....	....	.... ..	372	12,775	....	.....	2,600	26 00	....	.....	1	500	11	580
1	7	10	....	.....	13	375	....	.....	3,675	176 00	....	.....	.....	.....	1	10
6	95	199	....	.....	109	3,720	....	.....	1,700	44 00	....	.....	6	900	6	1,000
22	1,735	1,604	....	.....	719	24,320	2	15 00	13,450	506 00	102	306	†177	10,808	21	1,315

† 102 spearing houses, value $1,053.

during the year 1919, in the Public Waters of Lake Ontario.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (Blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.		$ c.
.....	874	700	.....	300	16,400	16,615	.....	.....	2,692	15,238 12
....	.....	.....	.....	.....	1,487	45	.....	.....	.....	67 33
.....	25	2,860	.....	.....	50	33,770	.....	.....	.....	9,134 10
....	775	.....	.....	.....	500	10,000	.....	.....	.....	15,387 50
.....	.....	.....	.....	.....	.....	400	.....	.....	.....	2,256 00
.....	.....	100	.....	.....	10,500	8,650	.....	.....	.....	4,807 00
.....	.....	24	.....	77	2,392	862	.....	.....	.....	11,643 50
.....	.....	.....	.....	.....	.....	20,930	.....	.....	.....	9,981 25
.....	14,055	5,980	.....	38,496	2,100	86,959	.....	.....	.....	29,088 94
.....	34,100	15,102	.....	51,400	118,756	128,145	202	.....	....	133,155 75
.....	73,624	110,126	.....	122,712	9,580	239,006	.....	.....	.....	129,397 98
....	13,772	800	.....	1,580	860	18,100	.....	.....	.....	21,282 80
.....	29,961	23,110	.....	33,275	5,846	39,532	.....	.....	....	16,206 37
.....	167,186	158,802	.....	247,840	169,471	603,014	202	....	2,692	317,646 73
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
.....	16,718 60	12,704 16	.....	19,827 20	6,778 84	24,120 56	202 00	.....	161 52	397,646 73

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1919,

District.	Fishing material.										
	Tugs.				Gasoline Launches.			Sail or Row Boats.			Gill Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
Inland Waters.			$			$			$			$ c.
1 Frontenac County					7	1,475	8	26	615	28		
2 Lanark and Leeds Counties					8	1,150	12	69	5,155	93		
3 Grenville, Dundas, Stormont and Glengarry Counties					3	550	4	24	431	30		
4 Prescott, Russell, Carleton and Renfrew Counties					7	2,300	10	26	479	28	1,900	270
5 Peterboro aad Victoria Counties					4	1,395	8	5	165	5		
6 Lake Simcoe					4	3,400	9	35	1,250	15		
7 Lake Nipissing					7	3,500	15					
8 Timiskaming and Nipissing Districts					13	7,150	33	28	2,125	27	19,200	3,480
Totals					53	20,920	99	213	10,220	256	21,100	3,750

Return of the kinds, quantities and values of fish caught

District.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel or Dore.
Inland Waters.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Frontenac County							6,799	
2 Lanark and Leeds Counties							17,147	
3 Grenville, Dundas, Stormont and Glengarry Counties							425	
4 Prescott, Russell, Carleton and Renfrew Counties				1,000			2,875	965
5 Peterboro and Victoria Counties								
6 Lake Simcoe		3,920		10,240		8,865		2,104
7 Lake Nipissing		60,248		55,896			27,760	128,322
8 Timiskaming and Nipissing Districts		10,888	843	27,224	500	3,470	81,683	82,688
Totals		75,056	843	94,330	500	12,335	136,689	214,079
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Values		3,752 80	84 30	9,433 00	50 00	1,233 50	6,834 45	21,407 90

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the
in the Public Waters of Inland Waters.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound nets.		Hoop nets.		Dip or Roll Nets.		Night Lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards.	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value.	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
3	50	60	....	.....	81	2,570	....	.....	.....	.....	....	.....	2	450	....	.....
4	100	210	....	.....	205	5,630	2	10	2,400	190	....	.....	4	335	....	.....
1	12	10	....	.....	15	530	1	10	6,150	163	....	.....	....	.....	....	.....
....	.....	.....	....	.....	35	883	....	.....	1,900	64	....	.....	4	140	1	10
1	100	500	....	.....	3	35	3	32	.....	.....	....	.....	....	.....	....	.....
6	2,150	2,650	....	.....	5	100	1	6	6,500	188	97	363	....	.....	....	.....
....	.....	.....	14	7,300	....	.....	....	.....	.....	.....	....	.....	6	2,600	5	900
....	.....	.....	25	6,100	42	1,125	....	.....	.....	.....	....	.....	12	4,850	17	1,700
15	2,712	3,430	39	13,400	396	10,873	10	58	16,950	605	97	363	28	8,375	23	2,610

during the year 1919, in the Public Waters of Inland Waters.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (Blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
.....	3,377	1,800	.....	26,409	.....	24,379	.....	.....	.....	3,909 53
3,477	9,471	13,840	.....	58,821	2,480	102,841	.....	.....	.....	12,247 71
6,950	4,225	1,375	.....	7,500	900	11,685	46	.....	.....	2,537 15
660	2,550	6,690	.....	21,727	650	36,495	.....	.....	.....	4,433 61
.....	440	600	.....	1,030	20,100	4,990	.....	.....	.....	1,178 00
.....	.....	6,774	.....	.....	169,950	16,613	.....	.....	.....	10,318 34
97,422	.....	.....	.....	.....	.....	20,365	2,974	.....	.....	38,302 64
.....	776	2,607	11,564	600	.....	118,911	.....	.....	.....	21,885 49
108,519	20,842	33,686	11,564	116,087	194,080	336,279	3,020	.....	.....	94,812 47
$ c. 13,022 28	$ c. 2,084 20	$ c. 2,694 88	$ c. 693 84	$ c. 9,286 96	$ c. 7,763 20	$ c. 13,451 16	$ c. 3,020 00	$ c.	$ c.	$ c. 94,812 47

ONTARIO

Recapitulation of the number of fishermen, tonnage and value of tugs, vessels and boats, industry during

	Districts.	Fishing material.											
		Tugs.				Gasoline Launches.			Sail or Row Boats.			Gill-Nets.	
		No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	Men.	Yards.	Value.
				$			$			$			$
1	Kenora & Rainy River Dists.	4	30½	4,200	10	89	36,797	155	88	4,365	94	164,864	30,816
2	Lake Superior	25	647	99,700	198	43	23,600	104	60	7,370	87	935,800	117,144
3	Lake Huron (North Channel)	20	520	108,400	99	32	23,600	72	55	3,310	61	862,470	75,761
4	Georgian Bay	16	343	72,700	74	73	42,090	155	64	4,390	105	915,104	85,041
5	Lake Huron (Proper)	10	227	41,500	53	61	28,970	123	35	3,110	49	647,800	52,595
6	Lake St. Clair, etc	....	.....	.....	.....	75	23,275	142	136	7,063	238	.....	....
7	Lake Erie	46	1,257	323,865	275	170	126,575	456	184	10,440	207	1,273,920	192,130
8	Lake Ontario	2	50	9,000	7	172	58,875	309	450	33,522	728	1,139,100	101,122
9	Inland Waters	....	.....	.....	.....	53	20,920	99	213	10,220	256	21,100	3,750
	Totals	123	3,074½	669,365	716	768	384,702	1,615	1285	83,790	1,825	5,960,158	658,359

Recapitulation of the kinds, quantities and values

	Districts.	Herring, salted.	Herring, fresh.	Whitefish, salted.	Whitefish, fresh.	Trout, salted.	Trout, fresh.	Pike.	Pickerel or Dore.
		lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Kenora and Rainy River Districts	.....	.....	1,100	496,483	50	90,807	635,404	827,049
2	Lake Superior	545,350	1,508,157	3,450	2,029,699	144,638	1,960,222	18,980	140,166
3	Lake Huron (North Channel)	2,869	28,506	848	799,336	10,550	1,595,608	160,639	225,404
4	Georgian Bay	5,600	60,870	9,650	391,008	26,300	898,417	28,341	76,839
5	Lake Huron (Proper)	8,000	143,017	6,800	90,619	51,550	827,722	3,333	182,562
6	Lake St. Clair, etc	.....	.....	.....	13,300	.....	.....	38,235	60,319
7	Lake Erie	.....	7,425,713	.....	1,094,280	.....	1,528	727,037	144,323
8	Lake Ontario	10,930	1,709,412	7,225	1,586,333	900	553,203	246,095	40,459
9	Inland Waters	.....	75,056	843	94,330	500	12,335	136,689	214,079
	Totals	572,749	10,950,731	29,916	6,595,388	234,488	5,939,842	1,994,753	1,922,000
	Values	$ c. 28,637 45	$ c. 547 536 55	$ c. 2,991 60	$ c. 659,538 80	$ c. 23,448 80	$ c. 593,984 20	$ c. 99,737 65	$ 192,200

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the fishing the year 1919.

Fishing material.													Other fixtures used in fishing.			
Seines.			Pound Nets.		Hoop Nets.		Dip or Roll Nets.		Night Lines.		Spears.		Freezers and Ice Houses.		Piers and Wharves.	
No.	Yards	Value.	No.	Value.	No.	Value.	No.	Value.	No. Hooks.	Value.	No.	Value	No.	Value.	No.	Value.
		$		$		$		$		$		$		$		$
....	.....	.....	70	27,060	47	3,495	..	.....	.....	.....	....	.....	68	18,985	52	8,675
....	.....	.....	55	30,225	10	350	...	.....	.....	.....	....	.....	24	21,170	25	10,575
....	.....	.....	175	108,900	8	340	...	.....	.....	.....	....	.....	36	14,575	25	42,000
5	1,075	1,195	23	18,300	19	410	...	.....	23,500	2,811	....	.....	20	6,345	21	4,850
5	295	350	64	34,200	.....	.....	4	49	4,900	475	....	.....	22	6,355	2	500
82	16,223	11,816	7	2,900	192	20,350	...	.....	5,800	418	....	.....	38	13,765	11	2,200
61	19,640	11,544	711	532,050	26	620	20	168	4,400	112	....	.....	144	167,550	72	38,695
22	1,735	1,604	.....	.....	719	24,320	2	15	13,450	506	102	306	*177	10,808	21	1,815
15	2,712	3,430	39	13,400	396	10,873	10	58	16,950	605	97	363	28	8,375	23	2,610
190	41,680	29,939	1,144	767,035	1,417	60,758	36	290	69,000	4,927	199	669	557	267,928	252	111,920

*102 spearing houses, value $1,053.

of fish caught during the year 1919.

Sturgeon.	Eels.	Perch.	Tullibee.	Catfish.	Carp.	Mixed and coarse fish.	Caviare.	Sturgeon Bladders.	Pickerel (Blue)	Value.
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
14,316	.....	9,717	241,263	76,754	53,232	259,972	269	.....	.....	210,227 64
21,919	.....	.....	840	.....	.....	290,217	152	.....	.....	545,963 21
13,523	.....	11,580	25,996	1,111	1,020	350,755	86	.....	.....	291,130 10
1,778	50	6,076	53,784	4,948	54,516	81,277	.....	.....	200	154,732 99
11,094	25	67,469	170,165	383	6,910	105,314	1,023	.....	550	146,159 60
10,800	.....	140,147	.....	73,805	294,440	537,262	478	.....	500	61,461 89
42,709	.....	1,096,935	1,323	33,972	378,380	793,658	1,827¼	4	2,387,787	819,305 61
.....	167, 86	158,802	.....	247,840	169,471	603,014	202	.....	2,692	397,646 73
108,519	20,842	33,686	11,564	116,087	194,080	336,279	3,020	....	.....	94,812 47
224,658	188,103	1,524,412	504,935	554,900	1,152,049	3,357,748	7,057¼	4	2,391,729	2,721,440 24
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
26,958 96	18,810 30	121,952 96	30,296 10	44,392 00	46,081 96	134,309 92	7,057 25	2 00	143,503 74	2,721,440 24

Comparative Statement of yield for 1918-19, according to Districts.

		1918.	1919.	Increase.	Decrease.
Kenora and Rainy River Districts:					
Herring, Salted	lbs.				
Herring, Fresh	"				
Whitefish, Salted	"	1,600	1,100		500
Whitefish, Fresh	"	677,706	496,485		181,223
Trout, Salted	"	229,800	50		229,750
Trout, Fresh	"	94,205	90,807		3,398
Pike	"	673,761	635,404		38,357
Pickerel (Dore)	"	753,370	837,049	83,679	
Sturgeon	"	24,291	14,316		9,975
Eels	"				
Perch	"	7,268	9,717	2,449	
Tullibee	"	240,218	241,263	1,045	
Catfish	"	207,524	76,754		130,770
Carp	"	12,001	53,232	41,231	
Mixed and Coarse Fish	"	364,437	259,972		104,465
Caviare	"	823	269		554
Pickerel (Blue)	"	12,815			12,815
Lake Superior:					
Herring, Salted	lbs.	283,100	545,350	262,250	
Herring, Fresh	"	3,681,609	1,508,157		2,173,452
Whitefish, Salted	"	12,400	3,450		8,950
Whitefish, Fresh	"	1,517,395	2,029,699	512,304	
Trout, Salted	"	90,800	144,638	53,838	
Trout, Fresh	"	2,659,057	1,960,222		698,835
Pike	"	18,354	18,980	626	
Pickerel (Dore)	"	107,282	140,966	33,684	
Sturgeon	"	6,003	21,919	15,916	
Eels	"	500			500
Perch	"				
Tullibee	"	8,873	840		8,033
Catfish	"				
Carp	"	820			820
Mixed and Coarse Fish	"	754,741	290,217		464,524
Caviare	"		152	152	
Lake Huron, (North Channel).					
Herring, Salted	lbs.	1,700	2,869	1,169	
Herring, Fresh	"	6,473	28,506	22,033	
Whitefish, Salted	"	4,200	848		3,352
Whitefish, Fresh	"	688,121	799,336	111,215	
Trout, Salted	"	8,500	10,550	2,050	
Trout, Fresh	"	1,617,645	1,595,608		22,037
Pike	"	59,869	160,639	100,770	
Pickerel (Dore)	"	194,612	225,404	30,792	
Sturgeon	"	12,114	13,523	1,409	
Eels	"				
Perch	"	11,049	11,580	531	
Tullibee	"	67,364	25,996		41,368
Catfish	"		1,111	1,111	
Carp	"	646	1,020	374	
Mixed and Coarse Fish	"	329,316	350,755	21,439	
Caviare	"	103	86		17
Georgian Bay:					
Herring, Salted	lbs.	26,300	5,600		20,700
Herring, Fresh	"	75,694	60,870		14,824
Whitefish, Salted	"	69,150	9,650		59,500
Whitefish, Fresh	"	362,137	391,008	28,871	
Trout, Salted	"	208,850	26,300		182,550

Comparative Statement of yield for 1918-19, according to Districts—Contiued.

—	1918.	1919.	Increase.	Decrease
Georgian Bay—Continued:				
Trout, Fresh ....lbs....	1,128,314	898,417	.....	229,897
Pike .... "	38,927	28,341	.....	10,586
Pickerel (Dore) .... "	66,655	76,839	10,184	.....
Sturgeon .... "	2,612	1,778	.....	834
Eels .... "	.....	50	50	.....
Perch .... "	2,500	6,076	3,576	.....
Tullibee .... "	75,759	53,784	.....	21,975
Catfish .... "	4,340	4,948	608	.....
Carp .... "	5,123	54,516	49,393	.....
Mixed and Coarse Fish .... "	28,980	81,277	52,297	.....
Caviare .... "	1,170	.....	.....	1,170
Pickerel (Blue) .... "	.....	200	200	.....
Lake Huron (proper):				
Herring, Salted ....lbs....	13,900	8,000	.....	5,900
Herring, Fresh .... "	250,100	143,017	.....	107,083
Whitefish, Salted .... "	2,700	6,800	4,100	.....
Whitefish, Fresh .... "	62,968	90,619	27,651	.....
Trout, Salted .... "	43,354	51,550	8,196	.....
Trout, Fresh .... "	732,331	827,722	95,391	.....
Pike .... "	1,449	3,333	1,884	.....
Pickerel (Dore) .... "	204,358	182,562	.....	21,796
Sturgeon .... "	18,783	11,094	.....	7,689
Eels .... "	4	25	21	.....
Perch .... "	64,014	67,469	3,455	.....
Tullibee .... "	231,858	170,165	.....	61,693
Catfish .... "	500	383	.....	117
Carp .... "	8,212	6,910	.....	1,302
Mixed and Coarse Fish .... "	144,021	105,314	.....	38,707
Caviare .... "	887½	1,023	135½	.....
Sturgeon Bladders ....No....	49	.....	.....	49
Pickerel (Blue) ....lbs....	.....	550	550	.....
Lake St. Clair, etc.:				
Herring, Salted ....lbs....	.....	.....	.....	.....
Herring, Fresh .... "	950	.....	.....	950
Whitefish, Salted .... "	.....	.....	.....	.....
Whitefish, Fresh .... "	29,010	13,300	.....	15,710
Trout, Salted .... "	.....	.....	.....	.....
Trout, Fresh .... "	.....	.....	.....	.....
Pike .... "	62,030	38,235	.....	23,795
Pickerel (Dore) .... "	40,871	60,319	19,448	.....
Sturgeon .... "	14,700	10,800	.....	3,900
Eels .... "	.....	.....	.....	.....
Perch .... "	147,481	140,147	.....	7,334
Tullibee .... "	.....	.....	.....	.....
Catfish .... "	62,593	73,805	11,212	.....
Carp .... "	224,455	294,440	69,985	.....
Mixed and Coarse Fish .... "	397,141	537,262	140,121	.....
Caviare .... "	451	478	27	.....
Pickerel (Blue) .... "	550	500	.....	50
Lake Erie:				
Herring, Salted ....lbs....	.....	.....	.....	.....
Herring, Fresh .... "	13,531,993	7,425,713	.....	6,106,280
Whitefish, Salted .... "	.....	.....	.....	.....
Whitefish, Fresh .... "	1,128,256	1,094,280	.....	33,976
Trout, Salted .... "	.....	.....	.....	.....
Trout, Fresh .... "	2,446	1,528	.....	918
Pike .... "	229,131	727,037	497,906	.....
Pickerel (Dore) .... "	184,379	144,323	.....	40,056

Comparative Statement of yield for 1918-19, according to Districts—Continued.

	1918.	1919.	Increase.	Decrease.
Lake Erie.—Continued:				
Sturgeon .....lbs....	51,928	42,709	.....	9,219
Eels ..... "	.....	.....	.....	.....
Perch ..... "	2,056,214	1,096,935	.....	959,279
Tullibee ..... "	.....	1,323	1,323	.....
Catfish ..... "	47,400	33,972	.....	13,428
Carp ..... "	711,493	378,380	.....	333,113
Mixed and Coarse Fish .... "	766,522	793,658	27,136	.....
Caviare ..... "	1,820	1,827¼	7¼	.....
Sturgeon Bladders .....No....	12	4	.....	8
Pickerel (Blue) .....lbs....	784,953	2,387,787	1,602,834	.....
Lake Ontario:				
Herring, Salted .....lbs.....	6,450	10,930	4,480	.....
Herring, Fresh ..... "	1,795,052	1,709,412	.....	85,640
Whitefish, Salted ..... "	63,000	7,225	.....	55,775
Whitefish, Fresh ..... "	1,273,501	1,586,333	312,832	.....
Trout, Salted ..... "	1,850	900	.....	950
Trout, Fresh ..... "	385,601	553,203	167,602	.....
Pike ..... "	212,800	246,095	33,295	.....
Pickerel (Dore) ..... "	15,141	40,459	25,318	.....
Sturgeon ..... "	1,600	.....	.....	1,600
Eels ..... "	136,428	167,186	30,758	.....
Perch ..... "	108,469	158,802	50,333	.....
Tullibee ..... "	350	.....	.....	350
Catfish ..... "	235,796	247,840	12,044	.....
Carp ..... "	142,378	169,471	27,093	.....
Mixed and Coarse Fish .... "	709,806	603,014	.....	106,792
Caviare ..... "	300	202	.....	98
Sturgeon Bladders .....No.....	2,000	.....	.....	2,000
Pickerel (Blue) .....lbs.....	14,941	2,692	.....	12,249
Inland Waters:				
Herring, Salted .....lbs.....	100	.....	.....	100
Herring, Fresh ..... "	42,215	75,056	32,841	.....
Whitefish, Salted ..... "	12,600	843	.....	11,757
Whitefish, Fresh ..... "	88,419	94,330	5,911	.....
Trout, Salted ..... "	30,000	500	.....	29,500
Trout, Fresh ..... "	61,501	12,335	.....	49,166
Pike ..... "	90,497	136,689	46,192	.....
Pickerel (Dore) ..... "	153,667	214,079	60,412	.....
Sturgeon ..... "	107,118	108,519	1,401	.....
Eels ..... "	24,110	20,842	.....	3,268
Perch ..... "	31,205	33,686	2,481	.....
Tullibee ..... "	8,272	11,564	3,292	.....
Catfish ..... "	112,354	116,087	3,733	.....
Carp ..... "	103,130	194,080	90,950	.....
Mixed and Coarse Fish .... "	234,359	336,279	101,920	.....
Caviare ..... "	3,723	3,020	.....	703

STATEMENT OF THE YIELD OF THE FISHERIES OF THE PROVINCE OF ONTARIO FOR THE YEAR 1919, AS FURNISHED BY THE FISHERMEN'S ANNUAL RETURNS.

Kinds of Fish.	Quantity.	Price.	Value.
		$ c.	$ c.
Herring, Salted ....lbs....	572,749	5	28,637 45
Herring, Fresh .... "	10,950,731	5	547,536 55
Whitefish, Salted .... "	29,916	10	2,991 60
Whitefish, Fresh .... "	6,595,388	10	659,538 80
Trout, Salted .... "	234,488	10	23,448 80
Trout, Fresh .... "	5,939,842	10	593,984 20
Pike .... "	1,994,753	5	99,737 65
Pickerel (Dore) .... "	1,922,000	10	192,200 00
Sturgeon .... "	224,658	12	26,958 96
Eels .... "	188,103	10	18,810 30
Perch .... "	1,524,412	8	121,952 96
Tullibee .... "	504,935	6	30,296 10
Catfish .... "	554,900	8	44,392 00
Carp .... "	1,152,049	4	46,081 96
Mixed and Coarse Fish .... "	3,357,748	4	134,309 92
Caviare .... "	7,057¼	1 00	7,057 25
Sturgeon Bladders ....No....	4	50	2 00
Pickerel (Blue) ....lbs....	2,391,729	6	143,503 74
Total	....	....	2,721,440 24

Quantities based on Fishermen's Annual Returns.
Prices based on figures furnished by the Dominion Bureau of Statistics.

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF THE PROVINCE.

———	1918	1919	Increase.	Decrease.
Herring, Salted ....lbs....	331,550	572,749	241,199	....
Herring, Fresh .... "	19,384,086	10,950,731	....	8,433,355
Whitefish, Salted .... "	165,650	29,916	....	135,734
Whitefish, Fresh .... "	5,827,513	6,595,388	767,875	....
Trout, Salted .... "	613,154	234,488	....	378,666
Trout, Fresh .... "	6,681,100	5,939,842	....	741,258
Pike .... "	1,386,818	1,994,753	607,935	....
Pickerel (Dore) .... "	1,720,335	1,922,000	201,665	....
Sturgeon .... "	239,149	224,658	....	14,491
Eels .... "	161,042	188,103	27,061	....
Perch .... "	2,428,200	1,524,412	....	903,788
Tullibee .... "	632,894	504,935	....	127,959
Catfish .... "	670,507	554,900	....	115,607
Carp .... "	1,208,258	1,152,049	....	56,209
Mixed and Coarse Fish .... "	3,729,323	3,357,748	....	371,575
Caviare .... "	9,277½	7,057¼	....	2,220¼
Sturgeon Bladders ....No....	2,061	4	....	2,057
Pickerel (Blue) ....lbs....	813,259	2,391,729	1,578,470	....
Total Pounds	46,002,115½	38,145,458¼	....	....
Total Decrease, Pounds, 1919	....	....	....	7,856,657¼

VALUE OF ONTARIO FISHERIES FROM 1901 TO 1919 INCLUSIVE.

Years.	Value. $ c.	Years.	Value. $ c.
1901	1,428,078 00	1911	2,419,178 21
1902	1,265,705 00	1912	2,842,877 09
1903	1,535,144 00	1913	2,674,686 76
1904	1,793,524 00	1914	2,755,293 11
1905	1,708,963 00	1915	3,341,181 41
1906	1,734,865 00	1916	2,658,993 43
1907	1,935,024 90	1917	2,866,424 00
1908	2,100,078 63	1918	3,175,110 32
1909	2,237,544 41	1919	2,721,440 24
1910	2,348,269 57		

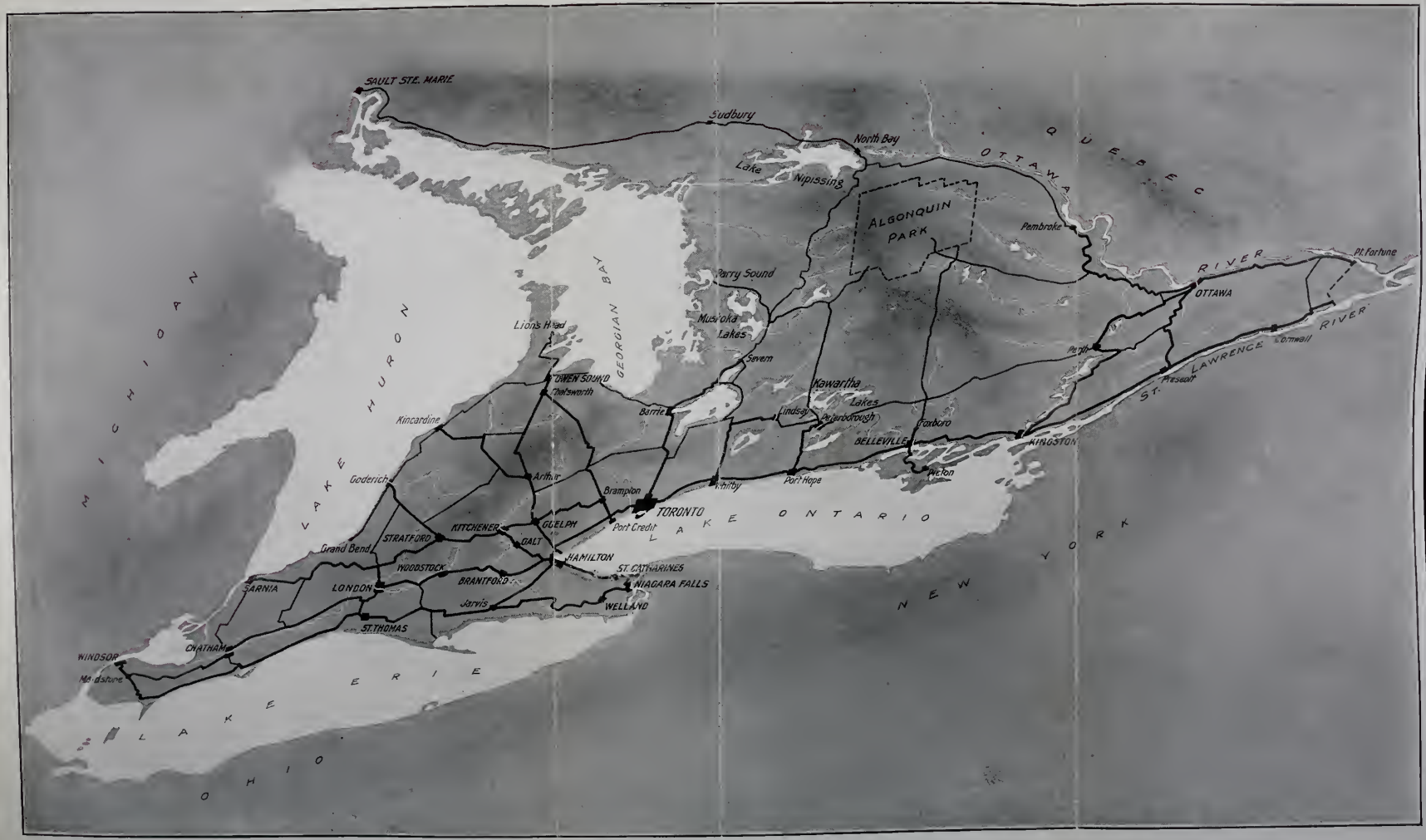
STATEMENT OF THE NUMBER AND VALUE OF THE TUGS, GASOLINE, SAIL OR ROW BOATS, NETS, SPEARS, ETC., USED IN THE FISHING INDUSTRY OF THE PROVINCE OF ONTARIO DURING THE YEAR 1919.

—	Number.	Value. $ c.
Tugs (3,074½ tons)	123	669,365
Gasoline Launches	768	384,702
Sail or Row Boats	1,285	83,790
Gill Nets	5,960,158 yards.	658,359
Seines (41,680 yards)	190	29,939
Pound Nets	1,144	767,035
Hoop Nets	1,417	60,758
Dip and Roll Nets	36	290
Baited Hooks	69,000	4,927
Spears	199	669
Freezers and Ice Houses	557	267,928
Piers and Wharves	252	111,920
Total		3,039,682

Number of men employed on Tugs	716
" " " Gasoline Launches	1,615
" " " Sail or Row Boats	1,825
	4,156

ays

Majesty.



HIGHWAYS, WATERWAYS AND SHORE LINES OF ONTARIO

A relief map in perspective showing how Provincial Highways, Northern trunk roads and a few County Road Connections will ultimately make a valuable asset of lakes and rivers, attracting to Ontario the tourists of the continent.

ANNUAL REPORT

OF THE

Department of Public Highways

ONTARIO

1920

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
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1922

1922
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To His Honour Lionel H. Clarke,

Lieutenant-Governor of the Province of Ontario

May it please Your Honour:—

I herewith beg to present for your consideration the Annual Report of the Department of Public Highways, relating to Highway Improvement in the Province of Ontario.

Respectfully submitted,

F. C. BIGGS,

Minister of Public Works and Highways.

To the Honourable F. C. Biggs,
Minister of Public Works and Highways,
Ontario.

Sir,—I have the honour to submit the Annual Report of the Department of Public Highways for the year 1920, having special reference to work on the Provincial Highway System under the Provincial Highways Act; work carried on by the several counties of Ontario under the Highway Improvement Act; and by township councils whose work is now subsidized under the Ontario Highways Act, 1920.

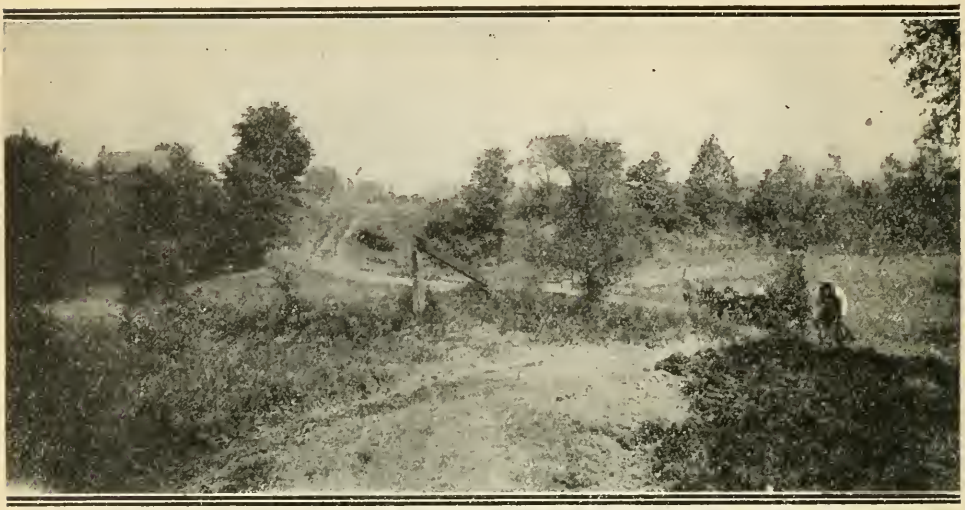
Reference is also made to the operation of the Motor Vehicles Act; and to other services within the purview of the Department of Public Highways.

I have the honour to be, Sir,

Yours respectfully,

W. A. McLEAN,
Deputy Minister of Highways.

Parliament Buildings, Toronto, April 26th, 1921.



In 1919, before improvement.

In 1920, after improvement.

ON THE HAMILTON-QUEENSTON PROVINCIAL HIGHWAY NORTH OF STONEY CREEK.

ANNUAL REPORT

OF THE

Department of Public Highways

Report of W. A. McLean, Deputy Minister

Good roads confer national and local benefits to an extent and magnitude difficult to realize or compute. The benefits of good roads are interwoven with the three sources of national wealth, Agriculture, Industry and Commerce, in a manner so diffused that it is impossible to summarize in statistics or other means the vast influence which they exert upon national and individual prosperity.

Canada, under conditions before the war, had but a light national burden, and the wastefulness of bad roads was a handicap which the wealth and resources of the country could sustain with comparative ease. To-day, with conditions reversed in many particualrs, the urgent necessity is for economy, for lessened cost of production, and for increased production, in all of which good roads are an essential form of equipment. It would be blind oversight to continue to equip agriculture, industry and commerce with refinements of machinery and labour-saving devices, while the merits of good roads in this respect are overlooked.

ECONOMY OF LABOUR

It is an essential principal of good roads, that a comparatively small amount of labour is put into their construction and maintenance, in order that a great saving of energy may be effected in haulage and transportation over them; and in order that additional travel and transportation over them (the evidence of national growth) may be encouraged.

The Toronto and Hamilton Highway may be cited as an example in this regard. Before construction, there was comparatively little through travel between these two cities. Forty miles of clay and sand roads were a barrier rather than a means of communication. Since construction, motor bus and motor truck services have been established, the daily traffic ranges from 1,500 to 3,000 vehicles at different points, commercial needs are being served, agricultural development has been markedly benefited, and a continuous line of homes is growing up, varying from the numerous shacks of thrifty working men, to the country residences of millionaires. All this development has been made possible at a cost equal to the wages of four men per mile of road, working continuously through the year. This covers interest, maintenance, and refunding of the bonds.

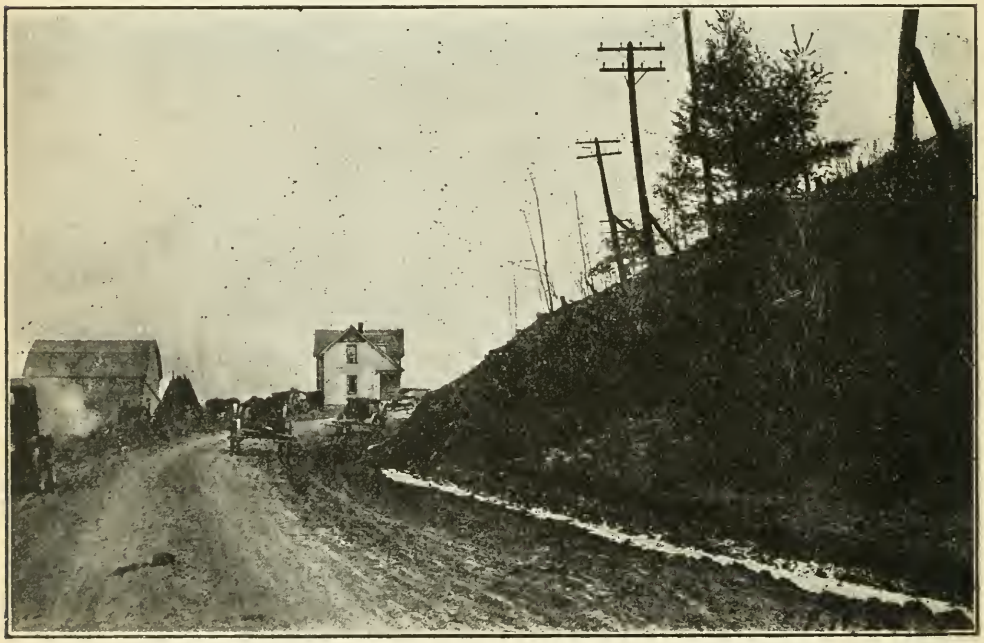
A HIGHWAY IMPROVEMENT FUND

The year 1920 has been notable by reason of very marked advance in highway legislation. A Highway Improvement Fund has been established, consisting of the unexpended balance of the monies previously appropriated for road purposes; $3,000,000 annually for a period of five years; the revenue from motor vehicle fees after deducting sufficient to provide for interest and sinking fund in respect of the foregoing issue of bonds; all repayments to the Province by municipalities on account of Provincial Highway construction (amounting to twenty per cent. of the total cost); and monies received from the Government of Canada. In addition to the foregoing, a special appropria-

tion of $7,000,000 for the year was credited to the Highway Improvement Fund. The Fund has thus been placed on a more stable basis. Further provision will be necessary to meet the growing needs of the Province, but the basis of a very substantial means of finance has been created.

PROVINCIAL HIGHWAYS

Approximately 1,178 additional miles of road were designated as Provincial Highways in 1920, making a total of 1,600 miles of the most important roads of the Province included in the Provincial Highway System to date. During 1920, a total of $4,491,895.81 was spent on these roads. 205 miles being graded, 195 miles gravelled, 37 miles of water-bound macadam, 10 miles of bituminous macadam, one-half mile of bituminous concrete and 14½ miles of cement were constructed; also 92 miles of macadam base. While the balance of the roads were maintained to the best standard possible considering the condition of the material and labour market. In addition to this road work, 16 bridges and 653 culverts were built.



Before improvement.

"Cape Horn," on the Hamilton-Queenston Highway, East of Beamsville.

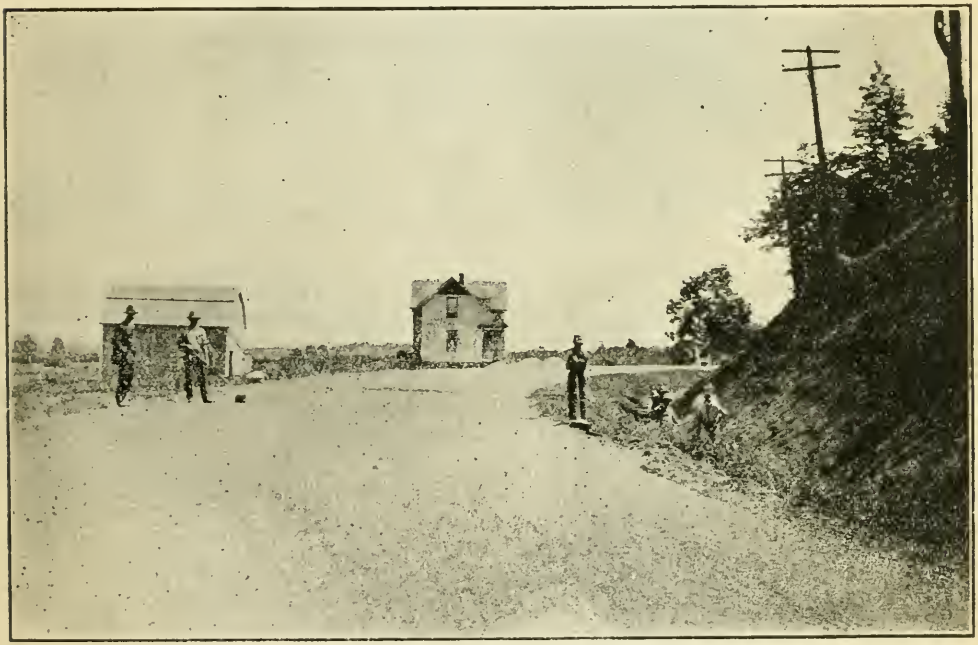
An analysis of the expenditure on Provincial Highways shows that a refund of $737,099.11 is to be anticipated from municipalities, and $1,426,843.00 from the Dominion Government under the Canada Highway Act, a total of $2,163,942.11 to be anticipated in refunds, with $2,327,953.70 as a definite charge on the Province. This includes the sum of $449,189.58 spent on road repairs; and approximately $1,049,099.43 on plant and equipment, gravel pits and other property of permanent value.

The Provincial Highway System as now designated comprises the leading roads of the Province. Connecting and radiating from the urban centres they are, as a class, the most heavily travelled roads. Municipalities had

found the task of their maintenance more than they could cope with, the roads had got out of repair, and an immediate expenditure for repair was urgently needed. In spite of the short period within which work could be organized and carried on during the year, a substantial amount of this work was overtaken and many portions of these leading roads will be found in a reasonable state for traffic of 1921. It is expected that by the end of the current year, the entire system will have been gone over in a preliminary manner and reasonable service provided.

The most permanent part of highway construction is the earth work, drainage, culverts and bridges. The surface continually wears out and has to be renewed. The work on Provincial Highways, in addition to repairs for immediate safety and service, has been largely of a most permanent character.

The objective of the Highway Department, a connected system of main highways throughout the Province, is measurably within reach, and as previously indicated, the year 1921 will see a substantial development of the links which were not repaired or constructed in 1920.



"Cape Horn," after improvement.

The folly of placing expensive surfaces on insufficiently prepared sub-grades is apparent to all who are familiar with the effect of the Canadian climate on roads as they have existed, and on new railway construction. Only time and a measure of wear can produce sufficient settlement and consolidation, in the highway sub-grade to satisfactorily support the so-called permanent surface. The surfaces of gravel and crushed stone now being generally laid by the Department are not only necessary for immediate traffic requirements, but are essential in obtaining and permitting settlement, and will provide an ideal base on which to lay more durable surfaces where rendered necessary by heavy traffic.

COUNTY ROADS

The year 1920 saw every County in the Province constructing and maintaining roads under the County Road System and earning the Provincial subsidy. At the present time the Department is paying subsidies to the counties on 9,725 miles of county roads—about eighteen per cent. of the roads in the counties—including 1,704 miles of Provincial County Road, or about nineteen per cent. of the total county road mileage.

Expenditures for the year on County Roads were as follows:—

	Total Expenditure.	Provincial Grant.
Maintenance.		
Provincial County Roads	$ 556,479.95	$ 333,898.77
County Roads	1,666,436.40	666,574.47
Total Maintenance	$2,222,916.35	$1,000,473.24
Construction.		
Provincial County Roads	$1,661,865.22	$ 997,119.13
County Roads	4,072,125.85	1,628,850.43
Total Construction	$5,733,991.07	$2,625,969.56
Summary.		
Total Maintenance	$2,222,916.35	$1,000,473.24
Total Construction	5,733,991.07	2,625,969.56
Total Expenditures	$7,956,907.42	$3,626,442.80

In addition to the maintenance of 9,725 miles of county roads the work on which the foregoing expenditures were made, including the following construction:—

Grading	188.68	miles
Gravelled surface	136.77	"
Waterbound macadam	190.72	"
Cement concrete	11.23	"
Bituminous penetration	37.68	"
Asphaltic concrete	6.11	"
Vetrified brick	.81	"
Total surfaced		383.32 miles
Bridges over 10 feet span	128	
Pipe and tile culverts	1,331	
Other culverts	281	

TOWNSHIP ROADS

At the 1920 session of the Legislature, provision was made whereby a subsidy of twenty per cent. might be paid to Townships on their expenditure on roads; and 184 townships took advantage of this aid during 1920, spending $1,631,460.12 and receiving subsidies aggregating $326,291.95.

Previous to 1920, a subsidy of twenty-five per cent. (but not exceeding $150.00) was paid toward the salary of a township road superintendent. This percentage has now been increased to forty per cent. without restrictions. As a result, 115 townships appointed superintendents during the year 1920, and received subsidies on their salaries, amount to $14,707.03.

One of the great merits of the financial aid to townships, is that it is enabling the Department to bring direct and definite organizing and technical advice to the township councils; and from this source alone, most desirable results are assured.

Standard sign at railway crossings.

ROAD COSTS

Road costs have in every country been greatly increased since the war in common with the general trend of prices. In Great Britain road costs are estimated as being three times greater than before the war. On this continent they have been approximately doubled.

Th total cost of the road is largely proportionate to the cost of common labour. Materials used in the road are the product of labour. Transportation of these materials is the product of labour. The value of stone in the quarry bed is negligible in the cost of the road. The cost of stone for the road is created by quarrying, crushing, transporting it, and consolidating it in the road bed. The same is true of cement and other materials. It requires as many days of labour now as before the war to build a road. The cost of a day's labour has doubled; therefore, the cost of the road has doubled.

One school of thought would contend that because of this increased cost, road-construction should be delayed until costs have lowered. This may be true of non-essential roads. But those who are in intimate contact with the road situation know that there are roads, the construction of which cannot be delayed except at an economic loss vastly in excess of the increased cost. Conditions of unemployment are also such as to fully justify this work as a means by which a transition period of distress and unemployment may be shared by the nation rather than a few unfortunate individuals. Public works have always been deemed justifiable for various economic reasons during periods of depression, and the present is no exception to the rule.

Expenditure on highways at the present time is undoubtedly a "shock absorber," of economic value, in relieving the stress of financial and labour conditions following the war.

PROGRESSIVE DEVELOPMENT

The road policy of the Department has been one of progressive development. Time is an essential consideration in the building of roads if the best results are to be attained. Certain types of surface construction which have been successful in England have failed on this continent; the reason being that in England they have laid on old and well-settled foundations; whereas, on this continent the attempt has been made to obtain an earth grade, drainage, foundation and wearing surface as one work and in one season. Uneven settlement and failure has been the inevitable result. Railway engineers know that on many new earth grades, appreciable settlement continues for at least three years.

By "progressive development" in road building is meant the method by which an earth grade is built one season, with merely sufficient gravel or stone surfacing to carry traffic. Work on the foundation is continued the following season; and by the third year the road bed is ready for the final surface.

By reason of this policy, very considerable expenditures have been necessary on earthwork, bridges, culverts and foundation before the final stage has been reached; and much misunderstanding has resulted. Foundations laid by the Department have been locally assumed to be the finished road, and, wearing to a rough condition, have been criticized. The Department has been fully aware of the principle that roads of the macadam and gravel type are not suitable for conditions of heavy traffic. Neither are they suitable for foundation until they have been subjected to one or two season's wear, to "take out the settlement" such as occurs on these roads in Spring and Autumn. Macadam and gravel construction is excellent for foundation purposes. It may be used for traffic temporarily; and this temporary traffic is of the greatest value in improving the road as a foundation.

Progressive road development" utilizing time, weather and traffic which cost nothing, is a means of economy, of durability and of general efficiency which this country in its road policy cannot afford to neglect.

DRAGGING THE ROADS

Experience in the maintenance of Provincial Highways, and certain county road systems, has demonstrated fully that the dragging of earth and gravel roads is of the greatest advantage. Were townships to establish adequate organization for dragging their gravel roads, a wonderful improvement would result in the road system of the Province. A steel drag with three blades, known as a "road-plane" is extremely effective in keeping a gravel road in the best possible condition. A light coating of moderately fine gravel should be added annually, if possible, to keep a floating surface over the gravel. Without this floating layer of gravel, an inch or so in depth, there is nothing for the plane to work with, to keep depressions and holes filled. Care must also be taken not to cover the gravel with earth or clay by drawing the latter from the edges of the road with the plane.

Over half the roads of the Province are gravelled. Systematic dragging of these roads would work a revolution in road conditions such as no other method would produce. Dragging can also be extended to earth roads with splendid results. But this plan of maintenance is not applicable to stone roads unless they are first covered with a light layer of suitable clean gravel or very fine crushed stone.

MOTOR VEHICLE REGISTRATION

Registration of Motor Vehicles (which is under the supervision of the Department of Public Highways) was as follows for the year 1920: —

Passenger Cars	155,861
Motor Trucks	16,204
Motor Cycles	5,496
Manufacturers and Dealers	1,462
Chauffeurs	19,563

These registrations show an increase over the year 1919 of 28,001 passenger cars, and 4,776 motor trucks.

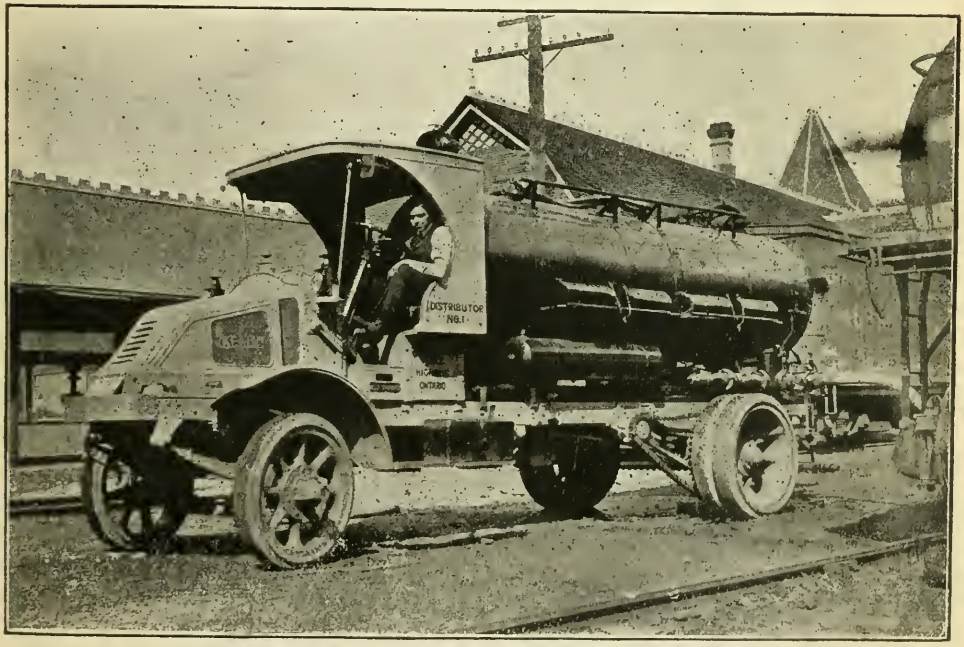
A classification according to occupations shows that 57,429 farmers are owners of passenger cars, or 36.8 per cent. of the total; and that farmers own 1,273 trucks, or 7.9 per cent. of the total.

In horse-power, 132,768 passenger cars are under 25 horse-power; and 18,569 between 25 and 30 horse-power. Only 4,395 are over 30 horse-power.

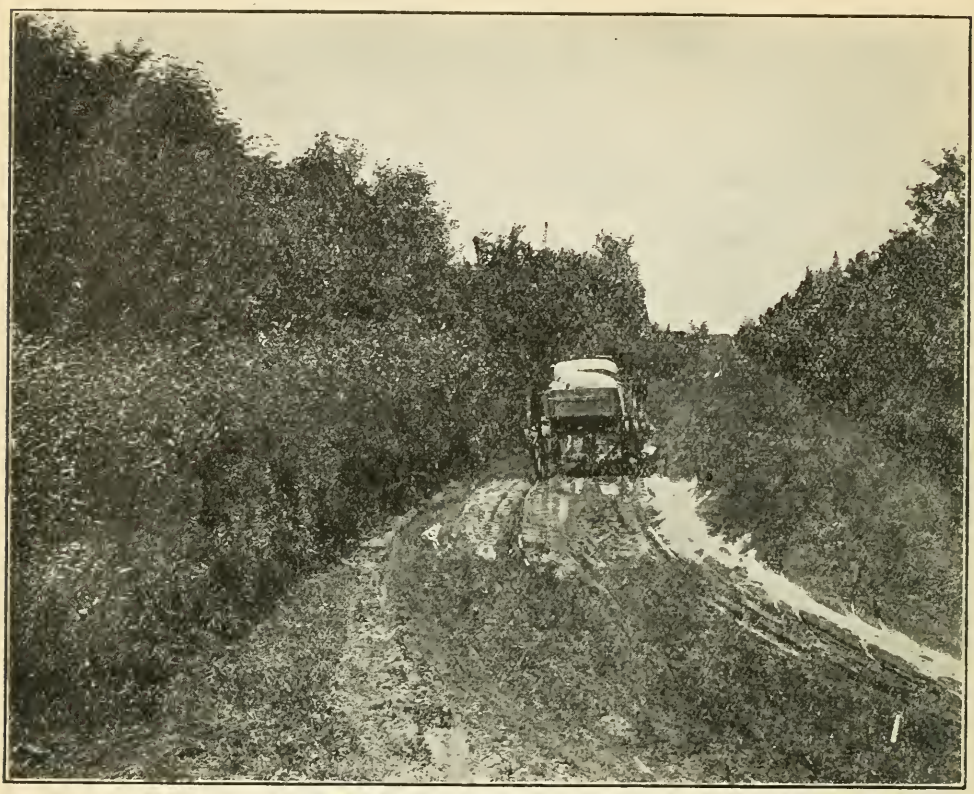
In the case of trucks, 13,476 are one-ton trucks or under; and 895 are registered as one and a half ton or under. There are 1,542 trucks of from two-ton to three and one-half-ton capacity; and only 291 are over three and one-half-ton capacity.

MOTOR CAR ACCIDENTS

Accidents may be divided into two classes; those which are unavoidable and those which are avoidable. The driver of every motor vehicle, in spite of all skill and care, is subject to the possibility of an accident; and generalities with respect to accidents placing the responsibility on the driver of the car, are unreasonable and unjust. Stearing gear or other mechanism may go out of order; or when an adult pedestrian steps without warning from the curb, directly in front of a moving car, no form of traffic regulation will prevent accident.



Modern Equipment for Oiling and Tarring.
Oil distributor used by the Highways Department.



The Ottawa-Prescott Highway.

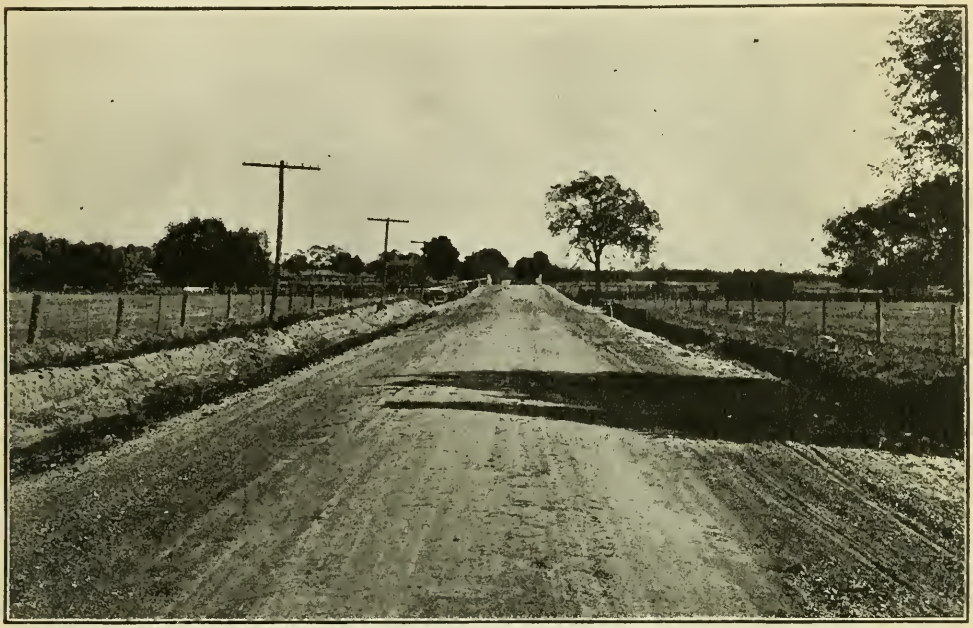
In its original condition, narrow, fences filled with stone and brush, without grading or drainage.

Excessive speed is the most prolific cause of accident, and is a form of careless and reckless driving. To this source, the majority of avoidable accident may be traced. The present speed law permits a maximum speed within urban municipalities of twenty miles an hour, to be reduced to ten miles at street intersections. With this speed is coupled the obligation placed upon the driver of a motor vehicle to drive with due care under all circumstances; so that on occasion a speed of five miles, or any movement at all, may be illegal. A former maximum speed of fifteen miles an hour unduly limited the usefulness of the motor car, and placed the driver in an unfortunate position legally, under the ordinary methods of speed enforcement. To overcome excessive speeding on city streets, a more rigorous enforcement of the present law should be applied, keeping motorists strictly within the speed laws. Were this done, the speed limitations would be found adequate.

Too many accidents occur to children. The presence of children on a street should be a warning to the driver of a motor car to drive with extreme care. The horn should be sounded to warn children playing on the sidewalk that a motor car is approaching. Children absorbed in play are thoughtless, irresponsible, and it is the plain duty of the driver of a motor vehicle to recognize these conditions. That a child runs from the sidewalk in front of a motor car is not always a sufficient excuse for an accident; for the driver of a motor vehicle, if he is competent to drive, should know that children do such

things, and he should be reasonably prepared for the emergency. Accidents to children are in many cases an evidence of reckless driving.

Accidents to pedestrians are caused in a degree by an unfortunate attitude of mind which belongs to some drivers, and which assumes that the pedestrian will get out of the way of the vehicle. Such a driver, instead of reducing speed and bringing his vehicle under sufficient control, merely toots



A finished section of the Ottawa-Prescott Highway.

the horn. Should the pedestrian fail to leap to safety, or should he become confused, stand still, or turn back, an accident results. The driver of a motor car should have the vehicle under such control that the ordinary pedestrian is not endangered, particularly at street intersections.

On the other hand, some pedestrians are careless and unreasonable in their attitude to motor cars. They loiter on the roadway, and in front of motor cars, to a degree that invites accident. They are willing to accommodate themselves to other pedestrians or to horse-drawn vehicles, but in the case of motor cars, their mental attitude is one of antagonism. They ignore the fact that the movements of the pedestrian are much more readily controlled than those of a motor car.

Were pedestrians to exercise more care in leaving the curb; and were motorists to remember that pedestrians, particularly children, are apt to leave th curb carelessly, the number of accidents on city sreets would be much reduced.

Glaring headlights are a fruitful cause of accidents, particularly on country roads; and a simplified method of determining and overcoming glare is greatly to be desired, in order that the anti-glare law may be more effectively enforced.

On country roads, excessive speed is still the most prolific cause of accident. Passing other vehicles on hills, at curves, and at intersections where vision is interrupted, is merely evidence of the desire for speed in its most dangerous form. There is need that all main highways be patrolled by officers on motor cycles, in order that reckless driving may be prevented.

TRAFFIC LAW ENFORCEMENT

Enforcement of provisions of the Motor Vehicles Act, the Highway Travel Act, and the Load of Vehicles Act rests primarily with municipal authorities. Fines are payable to the municipalities except in cases where conviction has been procured by an offiicer of the Province. Specal legislation in the case of the Toronto and Hamilton Highway places the onus of traffic law enforcement upon the Commission to which fines are payable; and a similar situation exists with respect to the Department of Public Highways in relation to Provincial Highways.

Provincial Highways have been merely in process of development, and to the present time, have not afforded much opportunity for speeding, but an increasing need for patrol by traffic officers is becoming evident.

Convictions reported to the Department for the year 1920 have been as follows:—

Speeding	Motor	Vehicles	Act,	Sec.	11	s.s. (1)	11,317
Reckless Driving	"	"	"	"	11	" (2)	450
Not registering change of address.	"	"	"	"	3	(a)	131
No driver's license	"	"	"	"	4	s.s. (1)	28
No gong, no horn	"	"	"	"	6	" (1)	3
No mirror	"	"	"	"	6	" (1b)	194
No lights	"	"	"	"	6	" (2)	1,301
No markers	"	"	"	"	8	" (1)	129
No rear light	"	"	"	"	8	" (3)	635
No proper markers	"	"	"	"	9	" (1)	33
Dirty markers	"	"	"	"	9	" (2)	68
Revolving lights	"	"	"	"	9	" (3)	56
Defaced markers	"	"	"	"	9	" (5)	52
Driver under age	"	"	"	"	13		18
Driver intoxicated	"	"	"	"	14		189
Passing standing street car	"	"	"	"	15		254
Passing street car on left	"	"	"	"	15	" (d)	44
Excessive noise	"	"	"	"	16	" (2)	11
Not returning to accident	"	"	"	"	18	"	21
Hiring car unlawfully	"	"	"	"	18	" (a)	2
Racing	"	"	"	"	12		1
Miscellaneous							35
Total number of convictions							14,972
Total of fines							$110,753.50
Total of costs							45,534.58

The Niagara River at Queenston

View at the terminus of the Provincial Highway.

The amounts of fines, as previous pointed out, are payable to the municipality. Of the foregoing amounts, the City of Toronto collected $23,820 in fines on 2,850 convictions; the City of Hamilton, $5,133 and $329.25 costs, with 1,022 convictions; the City of Ottawa, $1,986 and $267.50 costs, with 138 convictions; and the Toronto-Hamilton Highway Commission $37,051 fines and $21,060 costs, with 5,262 convictions.

The Ottawa-Prescott Highway in course of construction.

OUTLOOK FOR ROADS

There is reason for much optimism for the future of roads in Ontario. Township councils, under municipal management, have gravelled and improved many miles; and county councils have been doing much excellent work on the leading market roads within each county. The Provincial System in the course of three or four years, by energetic effort, and adequate financial support, will connect up this local improvement in a manner that will place old Ontario in a most enviable position with respect to common roads.

This work, co-ordinated in the Highway Department, will each year add an increasing efficiency of maintenance that is essential from the day a road is built.

Steam railways, harbours, steamship lines, electric railways are all desirable in their place, but without good roads to feed them, they cannot exist. The good country road is primary; all other means of transportation exist in order that they may carry the produce, and serve the traffic that grows up along the common road. The Province cannot be adequately developed until the common roads are in keeping with the splendid natural resources.

Scene on the Provincial Highway.
Magnificent view of "The Long Sault" near Cornwall.

Report on County and Township Roads

By DISTRICT ENGINEERS

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Toronto, April the 29th, 1921.

Sir:—

I have pleasure in handing you herewith a summary report on the work carried out on County Roads during the year 1920 in the Counties of Ontario, Victoria, Peterborough, Northumberland and Durham, Prince Edward, Hastings, and Lennox and Addington, in accordance with the provisions of the Highway Improvement Act.

It is gratifying to note the steady progress the townships in the various Counties are making towards road improvement. A large number of townships during the past year have sought Government aid, in accordance with the Government regulations.

It is a recognized fact that even though the war is over, the supply of unskilled labor, such as is largely employed on highway work, is not yet adequate to meet the demand. Labor forms a large percentage of the cost of improved roads, and labor is not only scarce, but the price is high. The same is also true of some of the materials that enter into road construction, so the net result is that but little over one half of the mileage can be built for the same amount of money as was built in pre war days.

At the present time the completed roads on the County System are in a fair state of repair, but the money available for construction and maintenance has not increased materially, although the mileage has increased and is being added to year by year. In some of the Counties this additional mileage is an added drain on the money available. These roads must be reconstructed and resurfaced, so unless there is an ample supply of money available for this purpose the roads will deteriorate. It is gratifying to note that some of the Counties see the danger of such a policy, and refrain from asking for more mileage. When the conditions become more favorable no doubt work of an extensive nature will be carried out by all Counties.

Respectfully submitted,

JOHN A. McVICAR,
District Engineer.

ONTARIO

The County of Ontario has 182 miles of County Roads, and 60 miles of Provincial County Roads under its jurisdiction, or 15.8% of the total road mileage within the County. With such a reasonable percentage ratio, and given a fair appropriation, this County should be able to show good results from the money spent.

Among the prominent physical features of the County are a great many streams which drain it. These bridges and culverts have to be built to provide cross drainage upon the roads. During the past few years much money has been expended upon these

structures, care being taken to make them permanent by the use of concrete and steel. During the past year the work carried out consisted mainly in the reconstruction of culverts and bridges. Some 8 reinforced concrete bridges with spans varying fom 12 to 60 feet were built, also a number of culverts with spans of five to eight feet. Bridge building is now nearing a completion in the County, so that we may confidently expect road construction to be prosecuted with greater vigor in the near future.

Systematic maintenance was carried out on all the roads so far as the money available would allow. It consisted of dragging, patching holes, and the resurfacing with a thin coat of gravel, long stretches of road. In addition some grading was done for side ditches, and some extensive hill cutting.

The chief units of machinery purchased during the year were: 18 to 36 h.p. Kerosene Tractor, Grader, 2 Scarifiers and Spreading Wagons, making the equipment more suitable for modern road building.

VICTORIA

Victoria has 69 miles of Provincial County Roads, and 160 miles of County Roads, or a total of 229 miles under its jurisdiction. This makes 21.5% of the total road mileage. The County Roads are in the southerly six townships of the County. The physical features of the County make a number of problems in road construction that will be expensive. Among these are some hills to be cut down, swamps to be graded, and bridges built.

The program of grading and gravelling in this County was an extensive one for the year. The construction consisted of the grading of about 17 miles, and the metalling of about 8½ miles of road. A number of concrete and concrete pipe culverts were built on these roads. In addition, two 16-foot span, and one 40-foot span bridges were built of reinforced concrete. The total mileage, including the work of construction, shows in all 26¾ miles of roads surfaced with gravel, and 9⅞ miles surfaced with crushed stone.

Maintenance was a very large item in this year's expenditure. Resurfacing of roads with gravel or crushed stone was carried out on about 12 miles.

A steam shovel with dump wagons was employed to build a grade across two stretches of swamp, each one half of a mile in length. For this purpose a borrow pit convenient to each section of the road was opened up. In these, the steam shovel was used to fill the dump wagons, the wagons hauled by team to the end of the grade and dumped. In this manner these long stretches of grade were built without undue expense.

The machinery items added during the year include the following: An Excavator (steam shovel), Tractor, Grader, 10 Dump Wagons, 4 Wheel Scrapers, 9 Steel Drags, and 2 Storage Tanks, which with a few smaller items amounted to nearly $15,000.00.

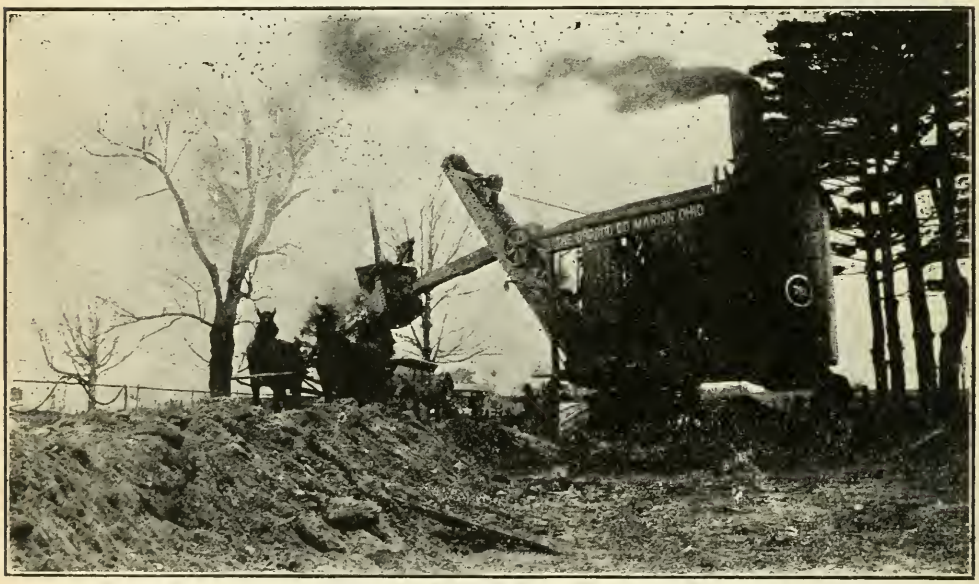
Another view of a completed section of the Ottawa-Prescott Highway.

PETERBOROUGH

Peterborough was the last County to come into the good roads scheme of the Government. It has 238 miles in the County Road System, 40 miles of Provincial County Roads, and 18 miles of suburban. This totals 296 miles under the County Road System, or 32.6% of the total road mileage within the area covered by the County Road System. This is very much in excess of the usual mileage that a County can take care of. It is the second largest percentage in the Province, and much in excess of what the people are willing to provide funds to construct and maintain in proper shape.

During the year there was expended upon maintenance of the Provincial County Roads $2,430, of which $1,743 was for resurfacing. Upon the County Roads there was expended $14,688, of which $10,272 was expended upon resurfacing and $2,062 upon bridges. Upon the Suburban Roads there was expended $9,170, mostly on resurfacing. There was $10,349 spent upon machinery. For this amount one new crusher, 3 wheel scrapers, 5 graders and 10 small blade graders, and 6 plows were purchased.

The program as outlined by the Superintendent is to bring the roads up to a fair degree for the travelling public, and later start construction.



Moving Earth by Steam Shovel.

On the Provincial Highway much modern equipment is used in making permanent improvements.

NORTHUMBERLAND & DURHAM

The County Road mileage amounts to 277 miles, and the Provincial County Roads 116 miles, making a total mileage of 393 miles under the County jurisdiction. This makes the County Roads 14.4% of the total road mileage in the County. Even with this reasonable percentage, and granted the appropriations are sufficient, careful work will be necessary to care for the roads.

Road construction throughout the Counties was largely a matter of grading out the side ditches, using the material to raise the shoulders, then hauling gravel and spreading it to give a new wearing surface.

The greater part of the grading operations was carried out with a 17-34 h.p. Tractor, pulling a heavy blade grader. Rapid progress was made in this way in the construction of side ditches. A large yardage was moved at low cost. This cleaning of old ditches and the construction of new greatly improved the drainage along these roads. Some hill improvement was made in a few places.

Upon the Provincial County Roads considerable construction was undertaken. In the townships of Seymour and Brighton, upon road number 38, a stretch of six and one quarter miles was graded. Of this amount 4 miles was metalled with crushed stone or gravel.

The average haul of the metal was about 3½ miles. In the grading operations considerable earth had to be hauled from borrow pits, as it was considered cheaper than moving the sides, which were of a very rocky nature. In this stretch, 44 pipe culverts were built, and one reinforced concrete culvert. This construction ran into approximately $34,000.00.

On the County roads about 3¼ miles of road was constructed, the grading and metalling amounting to something over $10,000. One bridge of 51 foot span, with reinforced concrete abutments and steel superstructure, was built at a cost of practically $4,500.00. The floor was a concrete slab.

In maintaining the County Roads nearly $51,000.00 was spent. Of this amount over $11,000.00 was spent in grading, about $2,000.00 in culverts, over $32,000 in resurfacing with gravel or crushed stone, and over $2,000.00 in dragging.

Special grants to towns and villages amounted to $17,000.00.

PRINCE EDWARD

Prince Edward County has 105 miles of County Roads and 45 miles of Provincial County Roads, or a total of 150 miles. This works out at 24.1% of the total road mileage in the County. This percentage is above the average for the Counties of Ontario, and perhaps more than the funds available will properly care for.

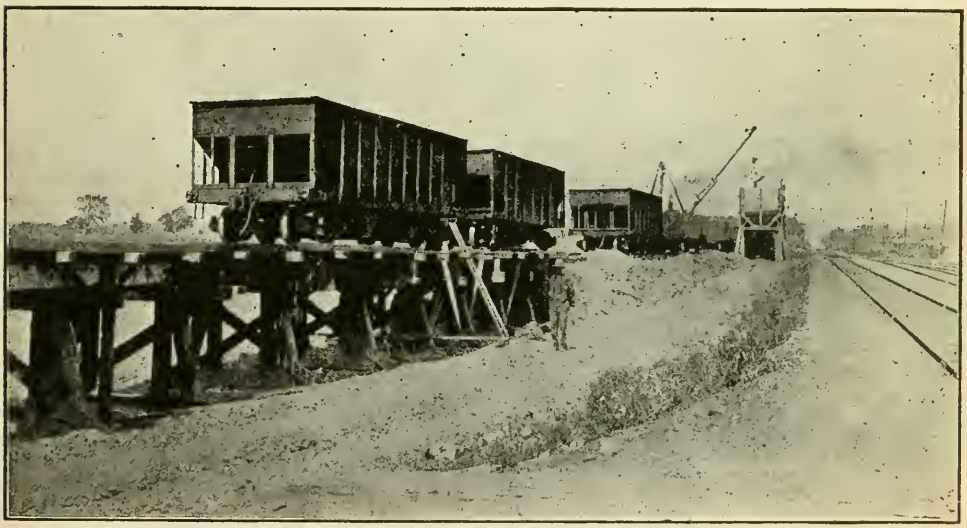
A considerable sum was expended upon the maintenance of the Provincial County Roads during the past year. In resurfacing with gravel or crushed stone over $11,500.00 was spent, and on oiling nearly $1,300.00.

On construction work upon County Roads $35,000.00 was expended. The work consisted of grading and metalling with crushed stone, 6¾ miles of road; laying 37 culverts and building one reinforced concrete culvert.

The enlarged program of work on the roads necessitated the purchase of more machinery. Among the larger units added were a steam roller and an engine. Other smaller and less expensive units were also added.

The crushed limestone used on the roads in Prince Edward shows unevenness in its wearing qualities. Some of the rock is soft and shaly, and does not long resist wear.

In the Village of Wellington, where the traffic has been heavy, the road was reshaped and resurfaced in a more substantial way than the usual macadam road. Tar was used as a binder, and a fine type of road resulted.



Elevated Track for Unloading Stone.
Contractors plant used in building the Provincial Highway in Haldimand County.

HASTINGS

The County of Hastings has 369 miles of County, and 130 miles of Provincial County Roads, or a total of 499 miles. This works out at 34.6% of the total road mileage in the area covered by the County Road System. It is far above the average, being considerably in excess of any other County percentage in Ontario. There can be but little doubt that the mileage is far in excess of what the people are able or willing to build and maintain. The result is going to be a process of slow, but inevitable deterioration of the County System.

The County includes much flat or rolling country, studded with many swamps and streams. Of the latter, three large rivers are important features, namely the Trent, Moira and Salmon. The bridging of these streams, and their tributaries is a serious problem, and takes up a large share of the monies appropriated for road improvement.

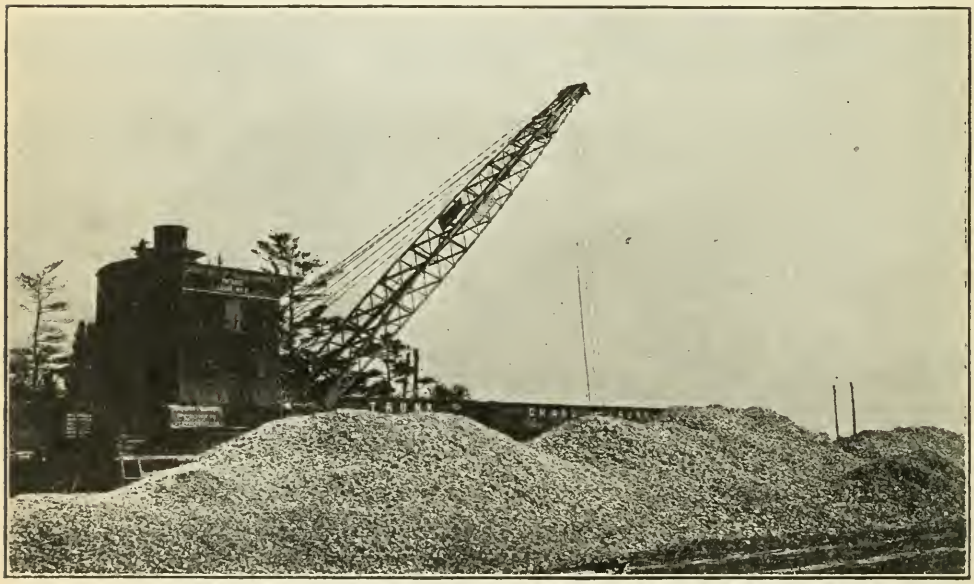
Hastings has been a long time in the County System, and at the inception took over for the most part old gravelled roads. These radiated in different directions from the chief market centres. In many cases the ditches which were originally formed along these roads have long since filled up, while in other cases practically no grading has ever been done. Apparently the metalling has been laid down on the existing flat surface. Another great difficulty in the majority of the roads in the County is their width. The original surveys allowed approximately 40 feet for right of way. Before attempting work of a substantial character the road allowance should now be widened to 66 feet. So far, however, no serious attempt has been made to have the property owners set their fences back, so as to allow the proper use of modern road building machinery.

The roads in the County System do not show the improvement one would expect. This is due to a number of reasons, and among these may be mentioned the following:

(a) The narrow width of the right of way, which for many roads is 40 feet, or thereabouts, precludes the possibility of using modern road building machinery to advantage, and so drainage is wanting or neglected.

(b) The ideal of the road superintendent is to cover mileage of roads with surface material, rather than adapting a well balanced policy of construction and maintenance.

(c) The heavy drain which bridge construction has made on County appropriations.



Putting Stone Into Stock Pile for the Provincial Highway.

It would have been a wiser policy to have specialized on bridge construction and drainage, and to have limited the addition of roads to the System to the amount of funds available for their proper consideration and maintenance.

The worst grade on any road effectively limits the traffic. Grades may be avoided or reduced by relocation or by cut and fill. The best practice is to establish once and for all a defined and permanent grade and alignment. It need not follow that the entire road is to be graded at once, but a start can be made and year by year the road will progress toward a final satisfactory profile.

In these respects Hastings has a Provincial County Road running as far north as Maynooth. This road could well be relocated by an engineer. The expenditures on the present road surface will later have to be abandoned. At present, the alignment is un-

necessarily crooked, with a number of excessive grades that could be greatly reduced, or perhaps avoided.

During the past year the work for the most part consisted of resurfacing with gravel and trimming shoulders. One or two short sections of construction work were undertaken.

On the Provincial County Roads there was expended nearly $76,000 on maintenance; of this about $14,000, was for grading and $59,000 for resurfacing with gravel or crushed stone. In addition small amounts were spent on culverts and bridges.

On the County Roads over $66,000 was spent, of which less than $6,000 was for grading and nearly $57,000 on resurfacing. Nearly $3,200 was spent on bridges and culverts. In addition, one 45-foot span reinforced concrete bridge was built.

About $10,400 was spent on machinery, the chief items being: two crushers, 3 graders, 1 scarifier, pick plow and 3 drags.

LENNOX AND ADDINGTON

There are 110 miles of County Roads, and 79 miles of Provincial County Roads, or a total of 189 miles of road under the jurisdiction of the County Council. The townships in which this mileage lies are in the south of the County. The mileage comprises 24.4% of the total road mileage in the area covered by the County System. This percentage is somewhat high for effective road construction and maintenance in view of the appropriations available.

On the Provincial County Roads, a distance of 1¾ miles was graded at a cost of about $1,300.00. A Road Survey was made of road No. 6, running south from Napanee to Adolphustown, a distance of about 18 miles. This was undertaken with the view of widening the road allowance to the full 66 feet, preliminary to the reconstruction of the road, in accordance with the regulations of the Department. A culvert of 10-foot span was also built on road No. 6.

A considerable amount of resurfacing was done during the year. In this, both gravel and crushed stone were used, the total expenditure amounting to over $31,000.00. This County should pay more attention to its side drainage while undertaking large resurfacing programs.

Upon the County Roads in N. Fredericksburg a mile and one half was graded and metalled at a cost of $4,400.00.

Special grants to villages amounted to over $11,000.00, expended upon grading and metalling.

The maintenance consisted of resurfacing, on which over $21,000.00 was spent. For this purpose both gravel or crushed stone were used. A number of small culverts were constructed upon these roads.

The following units were added to the machinery during 1920: one J.I. Case Grader, and 2 Bell Engines.

Toronto, January the 15th, 1921.

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Sir:—

I have the honour to submit a summary report of the work carried out under the Highway Improvement Act, and Ontario Highways Act during 1920 in the following Counties, viz:—Elgin, Essex, Huron, Kent, Lambton, Lanark, Middlesex, Norfolk, Oxford, Prescott and Russell, Renfrew and Stormont, Dundas and Glengarry.

During the year special visits were made besides the regular County inspection trips, at the request from the various municipalities.

Many of the townships availed themselves of the aid as provided for in the 1920 legislation of the Ontario Highways Act, and other townships are making arrangements to take this aid in 1921. Statute Labour has either been abolished, or commuted in many of the townships.

It is gratifying to note that there has been a general improvement on all County work, but the need in a few Counties is for systematic maintenance.

Labour conditions during 1920 held back considerable construction work, but the outlook for 1921 is good.

All of which is respectfully submitted,

J. A. P. MARSHALL,
District Engineer.

ELGIN COUNTY

Elgin County at the end of 1920 had 262 miles of roads under the County Road System, of which 164 miles are County Roads, 38 miles Provincial County Roads, and 15 miles Suburban Roads adjacent to City of St. Thomas. During 1920, 58 miles of roads have been taken over by the Province as Provincial Highways.

Approximately 150 miles of County Roads have been resurfaced with broken stone or pit gravel, and numerous small culverts lengthened by iron pipes or tile. During 1920, Elgin County continued to carry out the well defined system of maintenance in regard to gravel roads.

Expenditure classed as construction includes the labour and material necessary to construct 4 miles of stone road, the grading and tiling of 5 miles of road, the building of two concrete bridges on County Road No. 41, a new creosote wood block floor on the McIntosh Bridge over the River Thames. In addition, 5 reinforced concrete culverts were constructed and 62 pipe culverts laid.

Over 900 cords of gravel have been hauled by motor trucks from the County Pit, and placed on different roads within a radius of 12 miles, and over 300 cords of gravel hauled by teams, and placed on roads in the vicinity of the pit.

A number of options have been secured on gravel pits in view of putting in mechanical loaders, and it is the intention of the County Council to purchase several more motor trucks.

Township Aid.

Elgin has the distinction of being the first county in Ontario to have its quota of townships complete in the matter of taking township aid. The townships of Yarmouth, Bayham and Malahide appointed Township Road Superintendents. Yarmouth in 1917, and Southwold in 1918, did away with statute labour, while Aldborough and South Dorchester have commuted statute labour.

ESSEX COUNTY

The present County Road mileage of Essex County is 265 miles, of this 209 miles are County Roads, 38 miles Provincial County Roads, and 15 miles Suburban Roads. During the year 58 miles were taken over as Provincial Highways.

On Road No. 1 (Windsor Suburban Roads), Essex County has completed the construction of the 18-foot concrete roadway on the Huron Line in Sandwich West, from the Prince Road in the Town of Sandwich to the Marais Road, a distance of 1⅞ miles. The contract for this work was let in 1919, and commenced late in the fall of same year. On Road No. 8, the 18-foot concrete roadway on the Tecumseh Road from the Piletts Road to the bridge over Little River, in Sandwich East, a distance of two miles, was completed.

An 18-foot concrete roadway was constructed on the Front Road, Sandwich East, and completed through the Village of St. Clair Beach for a distance of 1⅞ miles. A bituminous penetration road was constructed on the Pike Road in Malden Township from the second to third concession. On several clay roads considerable light gravelling has been done, and is much appreciated by the users of the roads.

The County owns a large gravel pit which is equipped with a modern loading device. Two trucks were purchased late in the season, and were used for the balance of the season in resurfacing gravel roads within truck haul of the pit.

Township Aid.

The townships of Rochester and Sandwich East were the only two townships to take advantage of the Government aid. The Township of Sandwich East appointed a township road superintendent.

HURON COUNTY

The mileage of the Huron County Road System at the end of 1920 was 403 miles, of which 47 miles are Provincial County Roads. During the year the Huron Road from Goderich to Dublin, a distance of 25 miles, was assumed as a Provincial Highway.

In the Village of Exeter, approximately one mile of concrete roadway was constructed. Considerable gravelling has been done on various sections of the County Road system.

At Grand Bend, over the Aux Sable River, a new bridge of 130-foot span has been erected. This structure consists of a steel truss and concrete abutments. Early in the nineties a cut was made through here by the Dominion Government, and this undermined the old stone abutments to some extent, and the last few years the old structure was in a

dangerous condition. Owing to the delay during 1920, it was well on in the season before the steel truss could be erected. The concrete floor will be laid in 1921. This is a boundary line bridge between Huron and Lambton Counties.

On County Road No. 24, opposite Lot 15, Concession XIII, Ashfield Township, the old timber structure, known as the Buckingham Bridge, was replaced with an imposing reinforced concrete deck girder bridge, with three spans of 27 feet, 50 feet, and 30 feet respectively, and is a splendid example of neat design in reinforced concrete construction. The cost was approximately $11,000.00. Sader's Bridge on County Road No. 27B, consisting of two spans of 34 feet, through girder of reinforced concrete design, was built at a cost of approximately $4,700.00. A number of small reinforced concrete slab bridges were also erected. Huron County, with most of the large permanent structures built on the county roads, will now be able to devote more attention to the roads

During the year two crushers were purchased, and two gasoline tractors, besides a number of drags.

Township Aid.

The following townships took advantage of the Government aid, and also appointed township road superintendents—Hay, Hullett, Stephen, Colborne, Morris, Turnberry and Usborne. The following townships did not appoint a township road superintendent, but took the 20% aid,—Stanley, E. Wawanosh, Howick, W. Wawanosh, Ashfield and Goderich. Thus, out of the sixteen townships in Huron, only three failed to take advantage of Government aid, these being Grey, Tuckersmith and McKillop. These will probably be in line for 1921.

Immediately East of the City of Belleville.

An 86-foot road allowance provides ample space for the roadway, ditches, sidewalks, pole lines and trees.

KENT COUNTY

Kent County's mileage of roads under the County Road System consisted of 249 miles for 1920, of this mileage 40 miles are designated as Provincial County Roads, 200 as County Roads, and 9 miles as Suburban Roads adjacent to the City of Chatham. During 1920, 88 miles of roads were assumed as Provincial Highways.

The most important construction work undertaken by Kent County during 1920 was the extension of a concrete road on the River Road north of Chatham, in Dover Township. The length laid in 1920 was 4,306 lineal feet at a width of 16 feet. This is on a suburban road adjacent to the City of Chatham. On Provincial County Road No. 62, northerly from the Town of Wallaceburg, a concrete pavement 6,796 lineal feet in length and 16 feed wide was laid. On Provincial County Road No. 79, just south of the Village of Thamesville, the Duffis Creek Bridge has been partially erected. This bridge consists of a 50-foot span with a 20-foot clear roadway.

A number of gravel pits have been purchased by the County during 1920, and it is the intention of the County to do considerable resurfacing on many of the County Roads.

Considerable drainage assessment has been paid out during the year on County Roads, and a number of culverts erected.

Township Aid.

The only townships to take advantage of Township aid during 1920, were the Townships of Zone and Orford. Both these townships have statute labour.

LAMBTON COUNTY

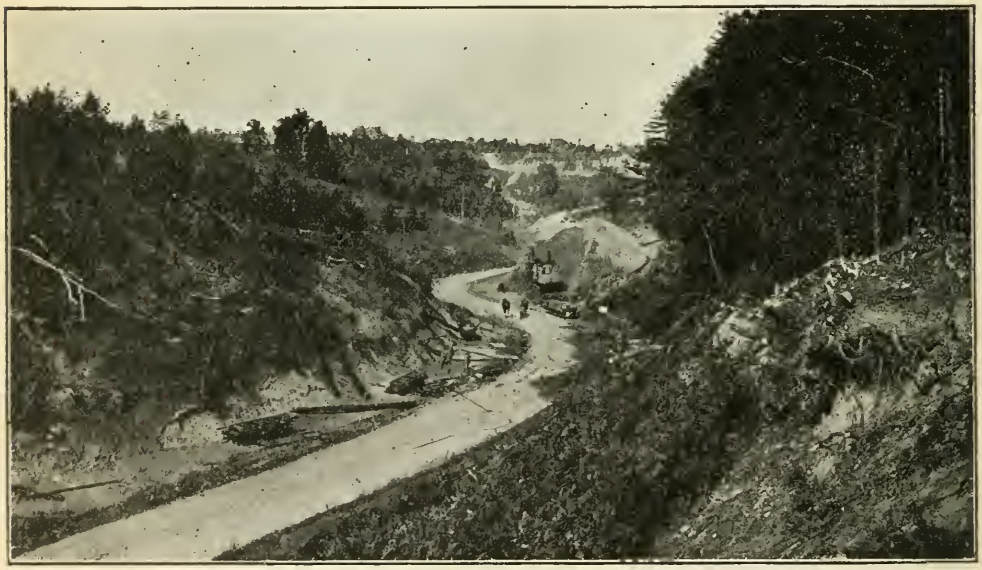
Lambton County Road mileage at the end of 1920 was 345 miles, of which 76 are designated as Provincial County Roads, 266 miles County Roads, and 3 miles Suburban Roads, adjoining the City of Sarnia. During the year 40 miles of road were assumed as a Provincial Highway. On Provincial County Road No. 81, the Grand Bend Bridge was erected. This is over the Aux Sables River at Grand Bend, and is on the boundary between the Counties of Lambton and Huron. Among other bridges erected during 1920 was Wood Creek Bridge, Bannister Bridge and the Inwood Bridge. Fifty-three culverts were constructed, and approximately 1,500 rods of tile drains laid.

During 1920 the County bought two motor trucks, and operated them from the County pit just north of Petrolea. With the aid of these trucks considerable mileage of roads were surfaced with gravel, and good results have been obtained.

Approximately $36,000.00 was paid out for new machinery by the County, the important units being two motor trucks and trailers, one steam shovel, one tractor, and two heavy graders.

Township Aid.

During 1920 the following townships appointed a township road superintendent, and partook of the 20% aid on construction and maintenance:—Sarnia and Enniskillen; while Plympton and Bosanquet townships passed by-laws for expenditure only. Enniskillen has commuted statute labour.



The Rouge Hill.
Near Toronto, formerly a serious obstacle to traffic.

LANARK

Lanark County has 224 miles of roads on the County Road System, of which 40 miles are designated as Provincial County Roads, and 184 miles as County Roads. During the year 32 miles of roads were assumed as Provincial Highways.

During the year considerable work was done on the Provincial County Road No. 83, Northerly from the Town of Perth for about 2½ miles, a tar penetration road being constructed. On this road in the Smith Falls Suburban Road area, 2 miles of penetration surface 16 feet wide was constructed, and one mile of stone base laid.

On County Road work, 12.5 miles of crushed stone have been laid, and 38 culverts constructed. During the year considerable machinery was added to the County equipment.

Lanark, with the work as carried out during the last few years, has made splendid progress on the construction of more durable roads.

Township Aid.

The Townships of Ramsay, Drummond, Bathurst, and North Elmsley, took advantage of the 20% grant on township roads. Ramsay appointed a township road superintendent in addition to taking aid.

MIDDLESEX COUNTY

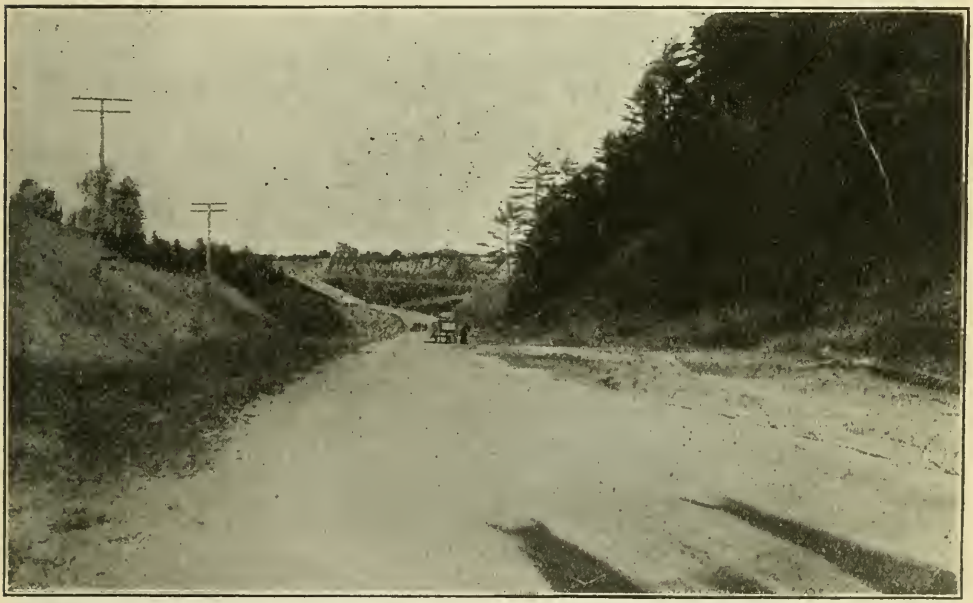
At the end of 1920 Middlesex County had 439 miles of roads under the County Road System, of which 47 miles are designated as Provincial County Roads, 360 miles as County Roads, and 32 miles as Suburban Roads. During the year 102 miles of roads were assumed as Provincial Highways.

The only construction work undertaken on Provincial County Roads was the erection of a reinforced concrete slab bridge of 10-foot span, on the Sarnia Gravel Road, opposite Lot 7, Adelaide Township, with a clear width of roadway of 26 feet. This cost $957.25, and is a great improvement over old conditions. The grade on either approach has been widened to the Provincial County Road standard.

On County Road No. 3, a new reinforced concrete slab bridge has been built on Con. III, N. E. R., Adelaide Township, and the concrete floor completed on a bridge on Road No. 17c., E. Williams, and on a bridge on Road No. 28, in the Town of Strathroy. Twelve miles of grading and ten miles of gravelling have been done on County Roads and 27 smaller culverts laid. Six gravel pits have been purchased by the County during the year.

One hundred and thirty miles of County Roads have been resurfaced with gravel, as maintenance work, besides considerable light grading.

During the year two motor trucks for placing gravel on the County Roads were purchased by County as well as 11 graders and a tractor. The expenditure for new machinery was approximately $26,000.00, for 1920.



The Rouge Hill.
Straightened, widened, and with a substantial bridge.

Township Aid.

During 1920 the following townships appointed a township road superintendent:— Delaware Lobo and Biddulph, as well as participating in the 20% aid on township roads. Delaware Township and Lobo Township have abolished statute labour during 1920. The following townships took the 20% aid:— Westminster, Caradoc, Ekfrid, North Dorcheter and London. Westminster abolished statute labour in 1919, and Caradoc and Ekfrid in 1920.

NORFOLK COUNTY

The mileage of roads at the end of 1920 under the County Road System in Norfolk County was 226 miles, of which 28 miles are designated as Provincial County Roads. During the year 32 miles of roads were taken over as Provincial Highways.

The most important work on Provincial County Roads was the continuation of a bituminous penetration surface on the Simcoe-Port Dover Road. It is the intention of the County to complete this roadway into Port Dover during 1921. This work cost approximately $44,000.00, being slightly over 2 miles in length.

On County Road No. 9, northerly and westerly from Port Rowan, the base course for a bituminous penetration surface was laid for a distance of 3,500 feet. Considerable tile draining has also been done here. On County Road No. 8, considerable grading and hill cutting has been done. On County Road No. 17, from County Road No. 29, westerly to Vanessa Station considerable gravelling was undertaken. On Road No. 8, Concession 7, Walsingham, the Overflow Bridge started in 1919, was completed; extensive heavy hill cutting and grade reduction has made a great improvement over the old conditions in this locality. On Road No. 17, the Leeson Bridge of 16-foot span was built at a cost of approximately $2,100.00.

During the year approximately $30,000.00 was spent on new machinery. This included the purchase of two steam rollers, two motor trucks, a cement mixer, a stone crusher, besides other smaller equipment.

The organization for County Road purposes in Norfolk County is good; with a definite plan as laid out by the county officials, results attained during the last few years are bearing out the wisdom of such a course, and other counties would benefit by the adoption of such a plan.

Township Aid.

During the year the Townships of Woodhouse and Windham took up the matter of Township Aid. The approved expenditure made on township roads in 1920, for Woodhouse, was $8,893.78, and in Windham $10,038.26. Both these townships were visited and the township officials interviewed. Woodhouse has commuted statute labour.

Hill at Ancaster.

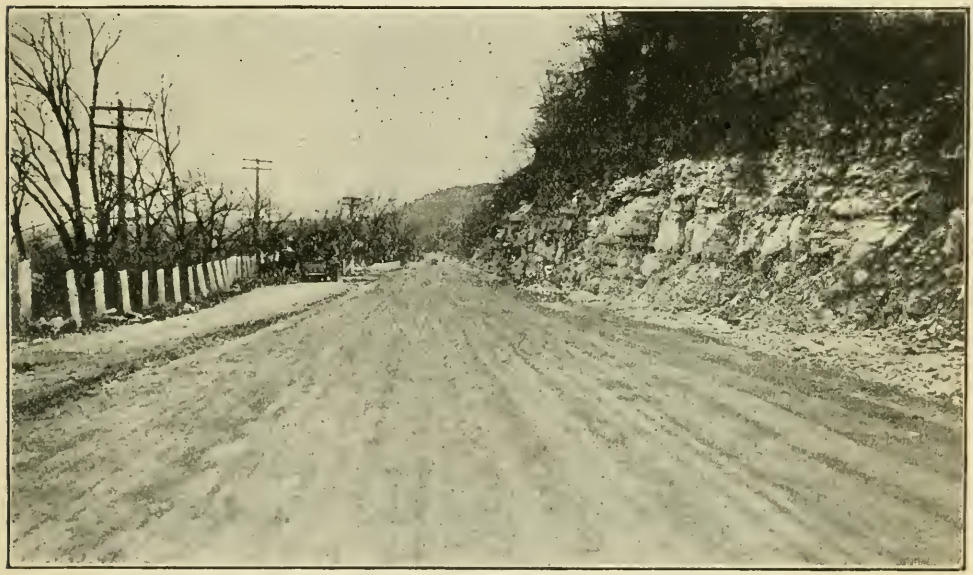
Narrow, winding, before improvement.

OXFORD COUNTY

Oxford County at the end of 1920 had approximately 276 miles of County Roads, of which 26 miles are Provincial County Roads, and 250 miles County Roads.

Oxford County during the last year has been doing considerable gravelling on many of their County Roads.

Oxford County's organization for county road purposes is a purely township one, and might be considerably improved on. Under the present by-law by which Oxford is operating the townships have practically the say as to what amount shall be spent on construction and maintenance, and where this is to be spent. The petitions of the various townships are sent in to the county council at the March session, and the allotment asked by each township is generally allowed. Some townships are well off for gravel, others are not. There seems to be no general co-operation between the townships, and one township during 1920 objected to a grading outfit, consisting of a tractor and grader coming into their township, when the crew did not consist of ratepayers in that particular township.



Hill at Ancaster.
Widened and straightened by moving a comparatively small amount of earth.

There is great need for immediate and proper maintenance work to be carried on throughout the County. Oxford during the past decade has spent a very large sum of money raised by debentures, on construction of their county roads. The great need in Oxford now is to maintain these roads to a reasonable standard. This will necessitate a great many more patrolmen being employed, along with an adequate supply of machinery. During 1920, one foreman had to look after 55 miles of County Roads in one particular township as well as being the Township Road Superintendent in that township. In all, for the 276 miles, there were during 1920 not more than a dozen maintenance foremen on the County Roads, and in some cases the responsibility was left with the reeves. It is absolutely imperative that this system of county road affairs be changed.

During 1920 special grants have been made to the villages and towns. It should be here emphasized that the Government subsidy is only allowed on construction work, and not on maintenance and repair work in towns and villages.

It is earnestly desirable that a proper system of road accounts and book-keeping be kept by the County Road Superintendent.

Township Aid.

During 1920, the following townships took advantage of the Government aid of 20%, and also appointed Township Road Superintendents:—Dereham, South Norwich and North Norwich, East Zorra, West Zorra, Blenheim and Blandford. The remaining two townships of East Oxford and East Nissouri, will probably take the Government aid in 1921. The townships of Dereham, West Zorra, East Zorra, and North Norwich, have abolished statute labour.

PRESCOTT AND RUSSELL

At the end of 1920 Prescott and Russell had 171 miles of roads under the County System. During the year, County Road No. 32, from New Orleans to Pointe Fortune, a distance of 59 miles, was assumed as a Provincial Highway.

On Provincial County Road No. 32, there were 4.25 miles of bituminous macadam built. A special grant of $8,000.00, was made to the Town of L'Orignal. On County Roads there were 1.87 miles of gravelling, 12.1 miles of waterbound macadam, and 7.58 miles of bituminous macadam constructed during the year. Most of this work was done by contract.

A number of bridges have been constructed, including the St. Berwardin, Lefaivre, Moose Creek, Scotch River Bridges, and Boundary Bridges.

During the year approximately $40,000.00 was spent on new machinery, which included three motor trucks.

Township Aid.

The Townships of Clarence, Cumberland and South Plantagenet, appointed Township Road Superintendents, and took advantage also of the 20% aid on township road work.

RENFREW COUNTY

At the end of 1920, the mileage under the jurisdiction of the County of Renfrew, consisted of 256 miles, of which 60 miles are Provincial County Roads, and 196 miles County Roads.

Considerable construction work was carried out on Provincial County Road No. 96; this work was done on three sections, viz.:—

(1) Town line Stafford, and Alice Townships, Con. II-III, Stafford, to Lots 27 and 28, Con. II, Stafford, thence easterly a distance of 1.4 miles, consisting of waterbound macadam, crushed granite being used.

(2) From G. T. Railway intersection at Renfrew Junction westerly to Lots 10 and 11, Con. III, Adamston Township, a distance of 2.1 miles, waterbound macadam, using field stone and crushed granite.

(3) From Lots 6 and 7, Concession VIII, Bromley line to Lots 10 and 11, Concession VIII, Bromley, approximately 0.7 miles of waterbound macadam was built, using crushed boulders.

From intersection with G.T. Railway at Renfrew Junction, easterly to Bank Street, in Town of Renfrew, 0.7 miles of bituminous macadam were built, under a special grant from the County.

On County Roads the chief construction work was the building of 2.5 miles of waterbound macadam road from Arnprior, northerly to Lot 13, Concession B, of McNab Township. The Dochant Bridge was built here on Lot 7 at a cost of $5,580.00. One mile of gravelling was done on County Road No. 10, in Wilberforce Township.

Approximately $40,000.00 was paid out by the County of Renfrew for machinery in 1920, the chief units of which were three road rollers, one tractor and one rock crusher.

Renfrew County has a good organization for carrying out the work; the chief feature being the establishing of road camps.

Considerable survey work and preliminary grading has been done throughout the County in preparation for future work.

Township Aid.

The Townships of McNab and Alice availed themselves of township aid for 1920, and in both these townships road superintendents were appointed.

STORMONT, DUNDAS AND GLENGARRY

The mileage under the County Road System consisted of 399 miles at the end of 1920. Of this mileage 126 miles are designated as Provincial County Roads, and 273 miles as County Roads.

Stormont, Dundas and Glengarry has the distinction of having the largest expenditure on County Roads of any of the counties for 1920. On Provincial County Roads, 24.5 miles of crushed stone roads were constructed. On County Roads, 27.5 miles of surfacing was done with crushed stone, and two miles with gravel. The work was done by contract or day labour.

Approximately $44,000.00 was spent on new machinery during 1920. The chief units were three road rollers, two crushers and one tractor.

Stormont, Dundas and Glengarry are operating under a County System, and have a good organization.

Township Aid.

The following townships took advantage of the Government aid by appointing a township road superintendent, and taking aid on construction and maintenance:—Lancaster, Charlottenburg, Kenyon, Cornwall, Finch, Winchester and Williamsburg.

Toronto, April the 26th, 1921.

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Sir:—

I have the honour to submit a summary report on the work carried out on County Roads during the year 1920, in the Counties of Brant, Bruce, Carleton, Dufferin, Frontenac, Grey, Leeds and Grenville, Perth, Simcoe, Wellington and Waterloo, in accordance with the provisions of the Highway Improvement Act.

In addition to the regular Departmental inspection, a number of special visits were made during the year at the request of the County officials, where matters of special importance were being considered. The assistance of the Department in all such cases appeared to be very much appreciated.

It is very gratifying to report that the work as a whole showed a marked improvement and a greater tendency to maintain the roads in such a way as to lay the foundation for future construction.

Respectfully submitted,

C. W. CORNELL,
District Engineer.

BRANT

Brant County assumed a system of County Roads in January, 1917, at that time designating 105 miles of their main highways, or 18.2 per cent. of the total road mileage.

At the present time the system consists of 62 miles of County Roads, 27 miles of Provincial County Roads, 12.75 miles of Suburban Roads, or a total of 101.75 miles.

The work on the Brantford Suburban Roads of the past year consisted of constructing a concrete pavement 18 feet wide and 0.40 miles long, at a total cost of $17,325.59, including ditching and grading. Grading to the extent of .75 miles was also completed on the Brantford Suburban Roads.

The work on Provincial County Roads consisted of one mile of grading and one mile of macadam road through the Village of St. George. The only other construction work undertaken, with the exception of some small sections graded, was a 20-foot reinforced concrete bridge erected on County Road No. 14.

A good system of maintenance has been carried on throughout the entire system.

The County purchased new machinery to the extent of approximately $12,000.00, the principle item being one 3½-ton truck with trailer.

BRUCE

Bruce County adopted a County Road System in June, 1917, designating at that time 350 miles of the leading roads in the County, or about 15.8 per cent. of the total road mileage in the County.

The County System at present consists of 209 miles of County Roads, 129 miles of Provincial County Roads, or a total of 338 miles. During the year 38 miles of roads were assumed by the Province as Provincial Highways.

The work of the past year on Provincial County Roads consisted chiefly of the completion of the eight miles of crushed gravel road between Kincardine and Tiverton. This was completed at a total cost of $71,560.01. The bridges on this road costing in addition to the above, $14,998.82. The only other construction work of importance on Provincial County Roads was 1.75 miles of crushed gravel road on Provincial County Road No. 67.

The work on County Roads for the most part took the form of maintenance. A number of small reinforced concrete bridges were constructed throughout the County, the largest of which was a reinforced concrete bridge of 84-foot span built on Povincial County Road No. 67.

The County purchased approximately $20,000.00 worth of new machinery during the year, the chief items of which were three rock crushers.

The road superintendent of Bruce acts under the direction of a committee of three. A very commendable feature of this committee is its permanent character, as it holds office during the pleasure of the County Council, and does not necessarily consist of members of the County Council.

CARLETON

Carleton County adopted a County Road System in 1909. The original system has been extended from time to time, at present it comprises 248 miles of County Roads, 22 miles of Provincial County Roads, and 20 miles of Suburban Roads, or a total of 290 miles, which is 18.5 per cent. of the total road mileage in the County.

The County accomplished a large program of construction, as well as maintenance and repair, during the past season. In all some $616,033.72 was spent on the work during the year.

The work on the Suburban Roads adjacent to the City of Ottawa consisted of the construction of 2.69 miles of two-course asphaltic concrete pavement, built at a total cost, including culverts, of $81,181.89, and 7 miles of waterbound macadam roadway. A 15-foot span reinforced concrete bridge was also constructed on the Suburban Roads.

The greater part of the work on Provincial County Roads took the form of maintenance and repair, some $12,391.17, being spent in that respect. In addition 2,000 lin. ft. of gravel road was constructed on Provincial County Road No. 88, while approximately 20 miles of gravel roads, and 3 miles of stone road were constructed on County Roads. Numerous pipe and tile culverts were laid and several small concrete culverts built.

Several substantial bridges were built throughout the County during the season, ranging in span from 14 ft. to 90 ft. The chief of these was a 90-foot span reinforced concrete and steel structure, erected between Lots 10 and 11, Concession 7, Township of Fitzroy. A 105-foot span bridge was also erected at Burritts Rapids, the sub-structure of this bridge was reinforced concrete, and the superstructure steel. The cost of this bridge is being borne equally by the County of Carleton and the United Counties of Leeds and Grenville.

Considerable road building equipment was purchased during the year. The Suburban Commission purchasing a road roller, tractor, stone crusher, and an oil distributor, as well as considerable equipment of lesser value, while the County puchased new machinery to the extent of $27,638.33, the main items of which were three road rollers, motor truck, and a concrete mixer.

DUFFERIN

The County of Dufferin adopted a County Road System in December, 1917. The total mileage designated at that time being 179 miles, or approximately 16.7 per cent. of the total road mileage of the County. The system as it now stands consists of 212 miles of County Roads. The Provincial Highway taking the place of what was originally a Provincial County Road.

The work of the past year consisted chiefly of maintenance and repair, some $5,500.00 being spent in this respect. The small amount of road construction undertaken consisted for the most part of grading and metalling, with either crushed stone or crushed gravel. All told, some 2 miles of road was constructed.

The County constructed a number of reinforced concrete bridges, ranging in span from 10 feet to 50 feet. The most important of which was the Bourne Bridge, a reinforced concrete through girder structure, erected on Road No. 25, at a total cost of $5,368.18.

GREY

The County of Grey assumed a County Road System in 1917. The main highways throughout the County being incorporated in the System. At the present time the County has under its jurisdiction 294 miles of County Roads, 62 miles of Provincial County Roads, and 30 miles of Suburban Roads. In addition to the above, 65 miles of Provincial Highways have been assumed within the County, taking the place of what was originally Provincial County Roads.

Very little work other than organization and maintenance and repair was attempted until the year 1919, when the County purchased considerable road building machinery, and thus were able to inaugurate an effective road building program.

The County has now four complete construction outfits at work. Two of these operated this year on the road between Owen Sound and Thornbury, while another operated south of Hanover, on Provincial County Road No. 65, and the fourth outfit was employed on County Road No. 29, the road passing through Ceylon and Flesherton. In addition to the above another outfit was employed on an extensive rock cut and hill reduction proposition east of Owen Sound, on Provincial County Road No. 14.

The road construction completed this year consisted of 5.25 miles of waterbound macadam on Provincial County Road No. 14, five miles of gravel on Provincial County Road No. 65, and two miles of waterbound macadam on County Road No. 29.

The County also constructed a number of reinforced concrete bridges, ranging in span from 10 to 80 feet. The more important of these was a 72-foot concrete arch bridge constructed on County Road No. 34, in the Village of Feversham, and an 80-foot concrete arch constructed on County Road No. 38, in the Village of Clarksburg. A system of maintenance has been carried out throughout the County by foremen appointed in each township to supervise all maintenance work within the township. These foremen have authority to engage such help as may be necessary from time to time, and are held responsible for the condition of the County Roads in their respective territories.

FRONTENAC

The County of Frontenac adopted a County Road System in 1907. The northern section of the County, however, was not included in the System. The System at present consists of 111 miles of County Roads, 38 miles of Provincial County Roads, and 42 miles of Suburban Roads, or a total of 191 miles, which is 23.9 per cent. of the total road mileage in area covered by the County Road System. The County now has 42 miles of Provincial Highway, 20 miles of which was originally a Provincial County Road.

The County is favorably situated with respect to road building material. The hauling costs can be reduced to a minimum, owing to the fact that limestone of good quality can be obtained at almost any point in the County.

Very little construction work was undertaken on Provincial County Roads. The work for the most part taking the form of maintenance and repair. The County Road work consisted of the construction of 4.75 miles of crushed stone road throughout the County. In addition, a number of pipe and tile culverts were constructed.

Two bridges were constructed, the Sydenham Bridge, an 18-foot span reinforced concrete structure, erected on Lot 3, Concessions 4 and 5, Township of Loughborough, and a 32-foot span reinforced concrete and steel bridge on the Suburban Roads, Lot 13, Concession 1, Township of Kingston.

The County purchased $9,388.81 worth of new machinery during the year, the chief item of which was a new road roller.

LEEDS AND GRENVILLE

The United Counties of Leeds and Grenville assumed a County Road System in 1910. This has been extended from time to time. The present system consists of 402 miles of County Roads, and 6 miles of Suburban Roads, or 22.9% of the total road mileage in the County.

The work in this County during the past season consisted of the construction of six miles of crushed stone road on County Roads Nos. 7 and 7a, from Lot 6, Concession 10, to Lot 19, Concession 8, Township of Bastard, and four miles of similar road on County Road No. 45a, Lot 2, Concessions 2, 3 and 4, Augusta Township. Stone to the extent of 375.6 was piled for work to be done in the Suburban Roads of Smiths Falls. The greater part of the work, however, in this County, took the form of maintenance and repair, $112,090.37 having been spent in this manner during the past season.

Two reinforced concrete and steel bridges were constructed during the year. Weir's Bridge, on County Road No. 51, opposite Lot 35, Concession 6, Township of Edwardsburg, was a 60-foot span, while Cochrane's Bridge, a similar structure of 62.5-foot span, was erected opposite Lot 10, Concession 8, Oxford Township. In addition to this the United Counties of Leeds and Grenville are paying half the cost of the Burritt's Rapids Bridge.

SIMCOE

The County of Simcoe adopted a County Road System in 1903, and from time to time the original system has been extended. At the present time the County Road System consists of 268 miles of County Roads, and 64 miles of Provincial County Roads, or 15.9% of the total road mileage in the County. The Provincial County Road mileage is 14.8% of the total road mileage under the jurisdiction of the County Council.

The construction work on the Provincial County Roads consisted of 4.5 miles of gravel road on the Penetang Road, opposite Lots 45 to 55, and Lots 60 to 70, also two miles of crushed stone road on Provincial County Road No. 63, between Penetang and Midland. In addition to the above, the concrete pavement on the Atherly Road in Orillia was completed. Some 20 pipe culverts were placed on Provincial County Roads.

The work on County Roads for the most part took the form of maintenance and repair, with the exception that a large number of pipe and tile culverts were laid; in all some 64 of these being placed during the year. Forty rods of crushed stone road was constructed on the townline of West Gwillimbury and Tecumseth.

Two reinforced concrete bridges of 12-foot span were constructed on Provincial County Road No. 20, at a total cost of $3,204.41. A number of reinforced concrete bridges, ranging in span from 12 feet to 60 feet, were constructed on County Roads. The more important of these bridges was a 40-foot span reinforced concrete beam structure, erected

on County Road No. 15, opposite Lot 29, Concessions 6 and 7, Essa, and a 60-foot structure erected opposite Lot 8, Concessions 7 and 8, Tecumseth. The substructure of this bridge was reinforced concrete, while the superstructure was steel. Neither of these bridges were completed during year. New road building machinery was purchased this year to the extent of $8,665.20; the main item being a roller and scarifier.

From the time the County adopted a County Road System until the year 1920, they operated on a township system; that is, all the money raised in a particular municipality for County Roads having to be spent on the County Roads in that particular municipality. This year, however, the County departed from this system, and is now operating on a strictly County basis. The results of this change will surely have a very marked effect in the continuous construction that is bound to follow such a move.

PERTH

The County of Perth adopted a County Road System in 1907. The original system has been extended from time to time. At present the County Council have under their jurisdiction 204 miles of County Roads, and 34 miles of Provincial County Roads. In all 23.8 miles, or 19% of the total road mileage of the County. The Provincial County Road mileage is 14.2% of the total road mileage under the jurisdiction of the County Council.

The work in Perth County in 1920 took the form, to a great extent, of maintenance and repair, some $12,012.76 being spent in this manner on Provincial County Roads, and $29,790.59 on County Roads. The construction on Provincial County roads took the form of tile draining. 7,644 lineal feet of tile ranging from 4 inches to 12 inches in diameter having been laid during the season.

The County Road work consisted of building one mile of broken stone and gravel road on County Road No. 5, opposite Lots 41 to 46, Township of Wallace, and also 1.25 miles of similar road on the townline of Logan Township and McKillop.

In addition to the above, 9,604 lineal feet of tile ranging from 4 to 10 inches in diameter, was laid on County Roads.

Only one bridge was constructed in the County during the year. This was a reinforced concrete structure 16-foot span, erected on Provincial County Road No. 46, at a cost of $988.40.

New machinery to the extent of $2,922.50 was purchased during the season, consisting of one large grader, one stone crusher, and one snow plow.

WATERLOO

The County of Waterloo assumed a County Road System in 1908. From time to time the original system has been extended. At the present time the system comprises 168 miles of County Roads, 21 miles of Provincial County Roads, and 16 miles of Suburban Roads, or a total of 205 miles, which is 24% of the total road mileage in the County. The Provincial County Road mileage is 10.2% of the total County Road mileage.

During 1920, 1.75 miles of concrete pavement was constructed on Provincial County Road No. 75, opposite Lots 18 to 36, in the Township of Woolwich. This completed a three-mile contract for pavement, which was let the previous year. In addition to the above, 1.75 miles of gravel road was constructed on Provincial County Road No. 76, in the Suburban area of Galt, opposite Lots 1 to 5, in the Township of Waterloo. The work on County Roads for the most part took the form of maintenance and repair, with the exception that a number of pipe and tile culverts, and small concrete culverts, were constructed.

A number of substantial reinforced concrete and steel bridges, ranging in span from 10 feet to 35 feet, were constructed throughout the County during the season. The more important of these was the Marten Bridge, a 35-foot span reinforced concrete structure, with steel girders erected on Provincial County Road No. 75, opposite Lots 18 and 19, Woolwich Township.

The County purchased $10,585.00 worth of new machinery during the year, the chief items of which were a road roller, and scarifier.

The County at present is operating on the Township System, that is, all the money raised in any one municipality for County Road purposes, must be spent on the County roads within that particular municipality. However, with the progressive concrete road policy now being mapped out, it is to be hoped for the sake of continuous construction that the County will shortly discard the present system, and proceed on a strictly County basis.

WELLINGTON

The County of Wellington adopted a County Road System in 1903. It now has 244 miles of County Roads, 46 miles of Provincial County Roads, and 22 miles of Suburban Roads, or a total of 312 miles, which is 17.5% of the total road mileage in the County. The Provincial County Roads comprise 14.7% of the total road mileage under the jurisdic-
n of the County Council.

The work this year on Provincial County Roads and Suburban Roads took the form entirely of maintenance and repair, some $29,055.11 being spent on the former, and $9,295.11, on the latter in this respect. With the exception of a number of pipe and tile culverts and small concrete culverts constructed, the work on County Roads also took the form of maintenance and repair.

The usual grants were made to the several towns and villages within the County, the work in several of these places taking the form of bituminous macadam construction. A number of substantial reinforced concrete bridges, ranging in span from 10 feet to 45 feet, were constructed throughout the County during the season. The more important of these was the Campbell Bridge, erected between Lots 25 and 26, Concession 4, Minto, being a 35-foot span reinforced concrete truss, and the Honsinger Bridge, opposite Lot 14, Concessions 2 and 3, Peel, a 45-foot span, also a reinforced concrete truss.

The County purchased during the year some $4,351.70 worth of new machinery, the chief item of which was a rock crusher. The rest consisted of graders and other smaller road maintenance equipment.

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Toronto, April 30th, 1921.

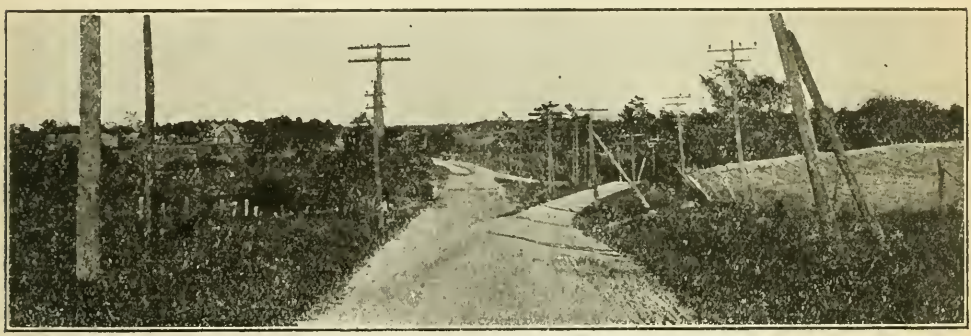
Sir:—

I have the honour to submit a brief report on the work performed during the year 1920 on the County roads of York, Peel, Halton, Wentworth, Lincoln, Welland and Haldimand.

The major portion of my time during the working season was occupied on bridge design for the Provincial Road System, and reviewing large numbers of bridge plans for County and Township roads.

Respectfully submitted,

ARTHUR SEDGWICK,
District Engineer.



The Construction of a New Bridge Permitted Improved Alignment.
The Kingston Road, east of Toronto.

HALDIMAND COUNTY

New construction in this County amounted to 28 miles of waterbound macadam 10 and 12 feet wide. The work was done by contract or by day labour. There were also 14.75 miles of road graded. The total expenditure amounted to $223,640.35. Expenditure on maintenance and repair amounted to $12,152.42, which consisted of re-surfacing from Hagersville to Nelles Corners, and dragging the earth roads.

Grants to the Villages of Caledonia, Jarvis and Cayuga, together with purchase and repair of machinery, and superintendence brought the total approved expenditure up to $252,713.71.

Township Aid.

The Townships of Oneida and Seneca were the only Townships to avail themselves of the Provincial Aid of 20 per cent.

WENTWORTH COUNTY

On County Roads $71,059.04 was expended on new construction. For this amount six and one-half miles of Macadam and three miles of gravel were built. Also a 45-foot concrete bridge with 24-foot roadway was built on Barton Street, at a cost of $5,578.00.

There was $65,121.65 spent on maintenance and repair, mostly for re-surfacing and bituminous surface treatment.

On Provincial County Roads, $30,669.05 was expended for construction, of which sum $2,500.00 has been spent to date on opening up Dundas Street through Lots 30 to 35 inclusive in Beverley Township including the construction of a 45-foot concrete bridge with 24-foot roadway and heavy cutting and filling. Expenditure for maintenance on Provincial County Roads amounted to $8,519.74.

The total expenditure was $191,278.92.

Township Aid.

With the exception of Ancaster and Glanford, all the Townships passed the necessary by-laws to participate in Provincial Aid of 20 per cent., and all except West Flamboro appointed Road Superintendents.

PEEL COUNTY

The County having been largely relieved of the burden of maintaining Dundas Street and the Centre Road, the expenditure this year was applied towards the maintenance and improvement of County roads. With an expenditure of $52,439.31, ten miles of gravel and waterbound macadam were constructed, and seventeen miles of road were graded. There were $32,885.30 spent for maintenance and repairs, mostly for gravel resurfacing. The Main Street of Streetsville was paved with bituminous macadam for a length of 6,033 feet at a cost of $37,871.83, towards which the Province contributed 40 per cent. of the cost of the central 20 feet.

Township Aid.

The Townships of Albion and Toronto Gore passed the necessary by-law and participated in the Provincial Aid to the extent of 20 per cent. The latter appointed a Township Road Superintendent.

YORK COUNTY

The total approved expenditure in York County amounted to $483,741.65. After providing some $32,000.00 for bridge construction, exclusive of small culverts, $44,000.00 for maintenance and repair, and $8,000.00 for superintendence, machinery, etc. there remained $399,464.29 for road construction, which consisted of seven and one-half miles of bituminous macadam, sixteen and one-half miles of macadam and gravel, and three and one-half miles of asphaltic concrete surfacing.

The bituminous macadam surfacing is on roads that have previously been constructed of waterbound macadam, it being the practice to first construct a waterbound macadam surface, and when the subgrade has thoroughly settled, to lay a bituminous surface.

In the outlying localities, gravel, where available, is used.

Two miles of asphaltic concrete surfacing was done on the Kingston Road east from the City of Toronto; also a mile and a third on the Weston Road north from Toronto. Six thousand lineal feet of asphaltic concrete on a concrete base was completed in the Town of Aurora, and six thousand lineal feet of bituminous macadam is being constructed in Newmarket.

Among others, concrete bridges at Islington and Unionville were constructed.

Township Aid.

The Townships of Markham and Etobicoke and Vaughan participated in Government Aid of Township Roads. Markham and Etobicoke appointing Superintendents.

HALTON COUNTY

Very little real road construction was done in this County during 1920. The total expenditure amounted to $131,428.75, of which $92,138.02 was expended on account of bridge construction. Of this latter amount $75,898.13 was spent on the Dundas Street Bridge over Sixteen Mile Creek previous to Dundas Street being assumed by the Province. In addition, $7,335.17 was required on account of the Bronte Bridge on the Toronto-Hamilton Highway, and $3,087.69 for the completion of the Tansley Bridge on Dundas Street. A 30-foot concrete bridge was completed on the Oakville-Georgetown Provincial County Road, and work on a second bridge on the same road was started.

On the Oakville-Georgetown Provincial County Road, some three miles of grading and two miles of gravelling was done at a cost of $14,650.00. There were $18,000.00 expended for general maintenance and repair throughout the County Road System.

Township Aid.

The Township of Nelson and Nassagewaya appointed Road Superintendents and participated in Government Aid for construction and maintenance.

LINCOLN COUNTY

In this County there were constructed during the year 11.25 miles of waterbound macadam; 3 miles of gravel; 3.38 miles of tar macadam, and three-quarter miles of concrete pavement; with an additional 15.5 miles of grading. In general, the surfacing was 16 feet wide. The cost of this work, including a number of culverts constructed or lengthened, amounted to $201,238.50. There were $29,945.68 spent for ordinary maintenance and repair. There was also spent on bridges the sum of $12,114.49.

Two motor trucks and one hoist were purchased during the year, which with the other smaller items amounted to $20,299.47. The purchase price of all machinery and plant acquired since 1909, amounts to $76,295.19.

The total expenditure for the year was $277,854.61.

Township Aid.

With the exception of Grimsby, all the townships passed by-laws to participate in the Provincial Aid of 20 per cent., and all of these, except Niagara, appointed Road Superintendents.

WELLAND COUNTY

The expenditure on Provincial County and County roads for new construction amounted to $110,077.75, for which 2.67 miles of macadam 16 feet wide; 2.58 miles of macadam 9 feet wide; 5 miles of bituminous macadam 16 feet wide, and a half-mile of concrete pavement in the Village of Ridgeway were built. A number of small culverts were replaced. In addition to the above $93,194.13 was spent for maintenance and repair, mainly for extensive resurfacing.

The work has been done chiefly on Provincial County Road No. 69; on County Road No. 5, south from the Town of Thorold; Road No. 16 in Humberstone Township and in the Village of Ridgeway; resurfacing east of the Town of Welland; north and south of Fenwick; and north of Ridgeway.

Township Aid.

All the townships, with the exception of Wainfleet and Willoughby appointed road superintendents and passed the necessary by-law to participate in the Provincial Aid of 20 per cent.

Easy Flowing Curves.

Replace narrow, winding and dangerous locations on the Provincial Highway.

Report on Provincial Highways

By the CHIEF ENGINEER

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Toronto, January 30th, 1921.

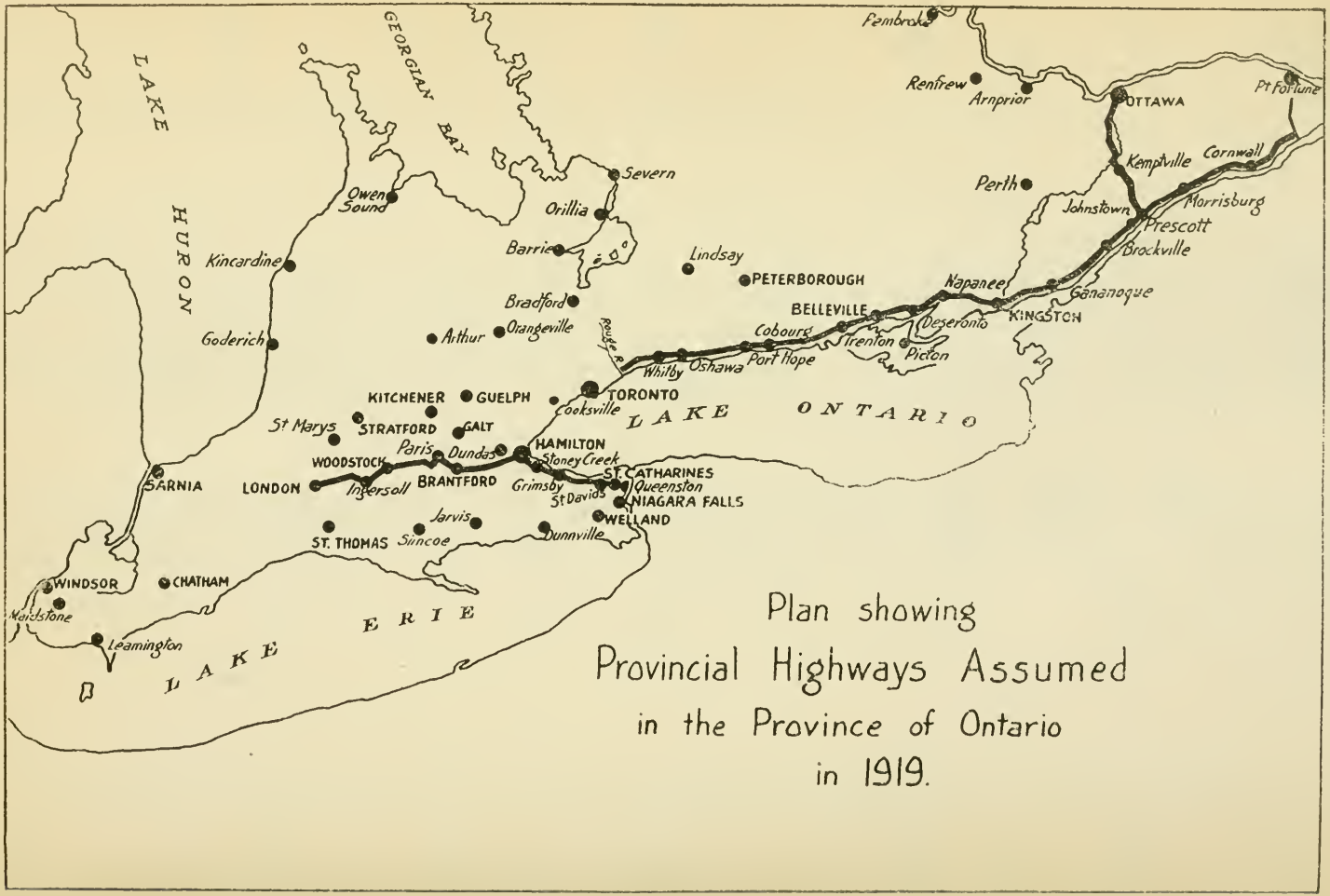
Dear Sir:—

I have the honour to report upon the work of constructing and maintaining the Provincial Highway System in the Counties of Ontario for the year beginning December 1st, 1919, and ending November 30th, 1920.

The system of Provincial Highways on December 1st, 1919, comprised a total mileage of 426.98 located as shown on Map No. 1. During the year the system was extended by adding 1,177.15 miles, as shown on Map No. 2, and with these Highways linking up practically every city and county town in Southern Ontario, good road service could be given to all Townships,, Counties and Cities within the entire area. A list of the roads added to the System, together with the mileage and date of designations is as follows:—

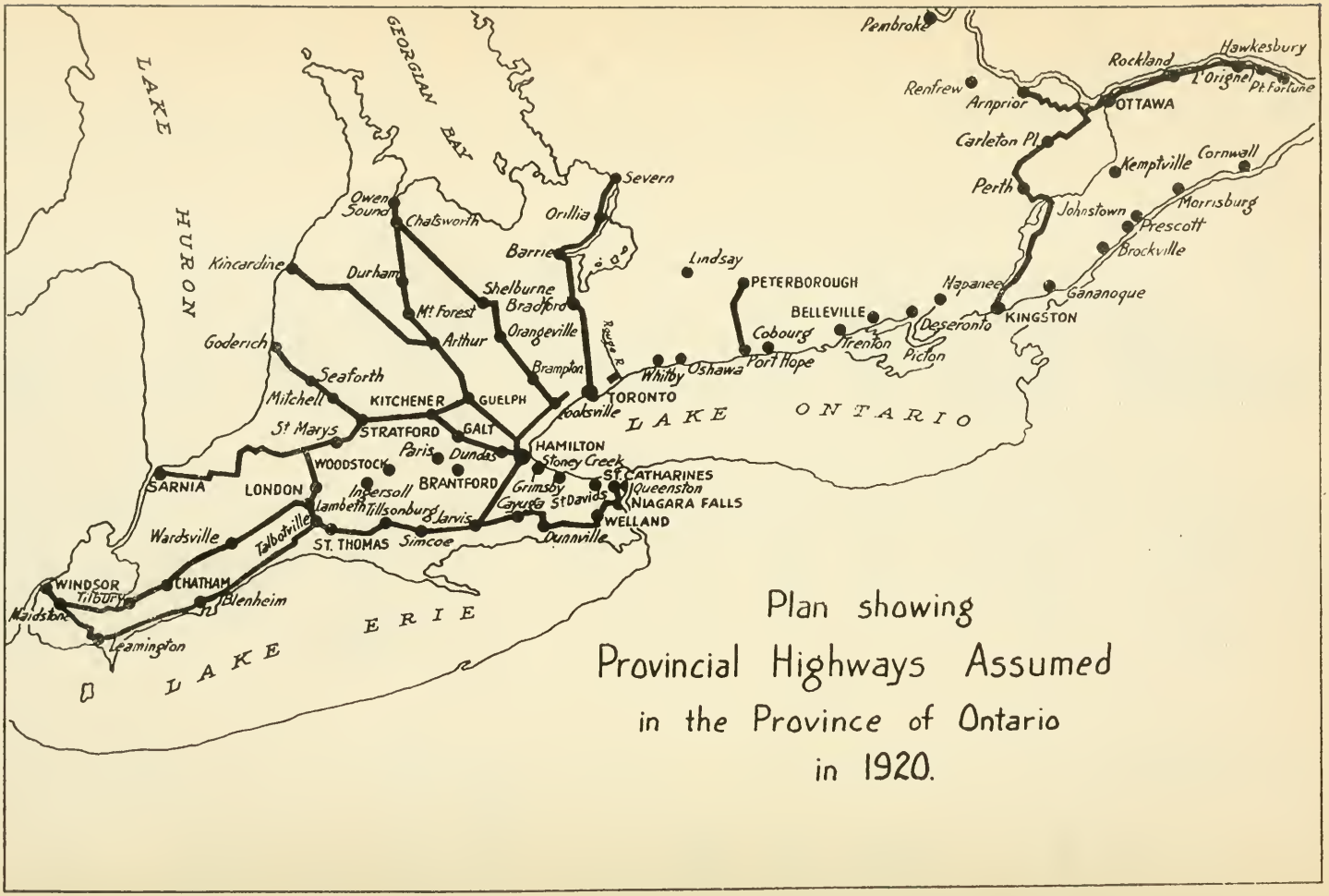
PROVINCIAL HIGHWAY ASSUMED IN 1920.

	Date of Designation	Municipality	Mileage	County Mileage
Bruce County	July 8th	Carrick Twp.	11.24	
	" "	Mildmay Village	.76	
	" "	Walkerton	.25	
	" "	Brant	4.28	
	" "	Kinloss	2.55	
	" "	Greenock	10.05	
	" "	Kincardine	9.04	
				38.17
Carleton	July 9th	Gloucester	7.07	
	October 6th	Nepean	18.85	
	" "	Goulbourn	15.65	
	" "	Huntley	8.88	
	" "	Fitzroy	13.35	
				63.80
Dufferin	July 8th	Melanchton	12.28	
	" "	Amaranth	.63	
	" "	Mulmur	.88	
	" "	Mono	12.03	
				25.82
Durham & Northumberland	August 11th	Hope	4.87	
	" "	Hamilton	6.67	
	" "	Monaghan South	2.58	
	" "	Cavan	4.82	
				18.94
Elgin	August 4th	Yarmouth	7.35	
	" "	Malahide	8.30	
	" "	Bayham	6.71	
	" "	Aldsborough	10.77	
	" "	Dunwich	10.08	
	" "	Southwold	15.18	
				58.39
Essex	June 24th	Sandwich West	4.11	
	" "	Sandwich South	7.00	
	" "	Maidstone	2.63	
	" "	Gosfield North	6.41	
	" "	Gosfield South	6.80	
	" "	Mersea	8.53	
	August 4th	Sandwich South	.87	
	" "	Maidstone	8.09	
	" "	Rochester	6.15	
	" "	Tilbury West	6.29	
	" "	Tilbury North	2.83	
				59.71
Grey	July 8th	Owen Sound City	.25	
	" "	Derby	2.65	
	" "	Sydenham	2.90	


LAKE HURON
GEORGIAN BAY
LAKE ONTARIO
LAKE ERIE
Pembroke
Renfrew
Arnprior
OTTAWA
Pt Fortune
Kemptville
Cornwall
Perth
Johnstown
Morrisburg
Prescott
Brockville
Severn
Orillia
Owen Sound
Barrie
Kincardine
Lindsay
PETERBOROUGH
Napanee
Gananoque
BELLEVILLE
KINGSTON
Deseronto
Trenton
Picton
Cobourg
Port Hope
Whitby
Oshawa
Bradford
Arthur
Orangeville
Goderich
Rouge R.
KITCHENER
GUELPH
TORONTO
Cooksville
St Marys
STRATFORD
GALT
Paris
Dundas
HAMILTON
Stoney Creek
WOODSTOCK
ST. CATHARINES
Queenston
SARNIA
LONDON
Ingersoll
BRANTFORD
Grimsby
St Davids
NIAGARA FALLS
WELLAND
Jarvis
ST. THOMAS
Simcoe
Dunnville
WINDSOR
CHATHAM
Leamington
Plan showing
Provincial Highways Assumed
in the Province of Ontario
in 1919.

	Date of Designation	Municipality	Mileage	Mileage
	" "	Bentinck	5.10	
	" "	Egremont	6.20	
	" "	Normanby	6.20	
	October 6th	Chatsworth	1.10	
	" "	Sullivan	5.66	
	" "	Holland	19.40	
	" "	Glenelg	6.57	
	" "	Artemesia	11.45	
	" "	Proton	3.38	
				70.86
Haldimand	June 24th	Walpole	13.93	
	" "	Jarvis	.82	
	" "	Rainham	1.01	
	" "	North Cayuga	11.30	
	" "	Cayuga	1.00	
	" "	Cansborough	8.15	
	" "	Dunville	1.10	
	" "	Moulton	5.95	
	" "	Oneida	7.90	
	" "	Seneca	2.65	
				53.81
Halton	July 31st	Trafalgar	9.35	
	" "	Nelson	6.15	
				15.50
Huron	July 8th	Howick	.80	
	" "	McKillop	3.59	
	" "	Tuckersmith	5.55	
	" "	Hullett	2.88	
	" "	Goderich	11.12	
	" "	Clinton	.14	
				24.08
Kent	July 2nd	Wheatley Village	.47	
	" "	Romney	13.00	
	" "	Tilbury East	3.40	
	" "	Raleigh	9.79	
	" "	Harwich	10.04	
	" "	Howard	6.71	
	" "	Orford	6.50	
	August 4th	Tilbury East	7.00	
	" "	Raleigh	8.47	
	" "	Chatham	9.21	
	" "	Camden	6.17	
	" "	Zone	7.59	
				88.35
Lambton	July 15th	Sarnia	7.90	
	" "	Plympton	11.43	
	" "	Warwick	14.45	
	" "	Bosanquet	6.70	
				40.48
Lanark	October 13th	Beckwith	6.50	
	" "	Ramsay	4.62	
	" "	Lanark	.84	
	" "	Drummond	15.45	
	" "	Elmsley North	6.25	
				33.66
Leeds	October 13th	Elmsley South	6.75	
	" "	Kitley	1.15	
	" "	Bastard	10.77	
	" "	Crosby South	10.68	
	" "	Leeds	6.68	
	" "	Gananoque	1.51	
				37.54
Lincoln	October 13th	Niagara	.85	
				.85
Middlesex	June 24th	Westminster	13.05	
	" "	London City	.25	
	July 2nd	Delaware	4.24	

	Date of Designation	Municipality	Mileage	Mileage
	" "	Caradoc	9.13	
	" "	Ekfrid	9.16	
	" "	Wardsville Village	.66	
	" "	Mosa	10.61	
	August 6th	London	18.36	
	" "	Biddulph	6.32	
	August 11th	Williams West	8.35	
	" "	Parkhill	.25	
	" "	Williams East	7.10	
	" "	McGillivray	4.00	
				91.48
Norfolk	August 4th	Middleton	11.90	
	" "	Windham	5.80	
	" "	Charlotteville	2.75	
	" "	Simcoe Town	.10	
	" "	Delhi	.33	
	" "	Townsend	4.40	
	" "	Woodhouse	4.75	
				30.03
Oxford	July 31st	Tilsonburg Town	.20	
	" "	Dereham	.64	
				.84
Peel	July 22nd	Toronto	17.82	
	" "	Chinguacousy	11.80	
	" "	Caledon	11.08	
				40.70
Perth	June 24th	Downie	2.59	
	" "	Ellice	3.90	
	" "	Fullarton	2.54	
	" "	Logan	4.33	
	" "	Hibbert	3.94	
	July 29th	Blanshard	7.01	
	" "	Downie	7.92	
	" "	Easthope North	5.70	
	" "	Easthope South	5.70	
				43.63
Peterborough	August 11th	Monaghan North	7.95	
	" "	Peterborough	.10	
				8.05
Prescott & Russell	August 4th	Cumberland	10.65	
	" "	Clarence	9.54	
	October 13th	Rockland	1.09	
	August 18th	North Plantagenet	13.81	
	" "	Alfred	7.14	
	" "	Longueuil	5.05	
	" "	L'Orignal	2.96	
	" "	Hawkesbury West	2.91	
	" "	Hawkesbury East	10.12	
				63.18
Simcoe	August 18th	Gwillimbury West	6.60	
	" "	Innisfil	12.16	
	" "	Barrie	.60	
	" "	Vespra	.80	
	" "	Oro	16.20	
	" "	Orillia	17.68	
				54.04
Waterloo	July 29th	Waterloo	10.70	
	" "	Wilmot	8.50	
	July 8th	Dumfries North	3.85	
	" "	Waterloo	7.00	
				30.05

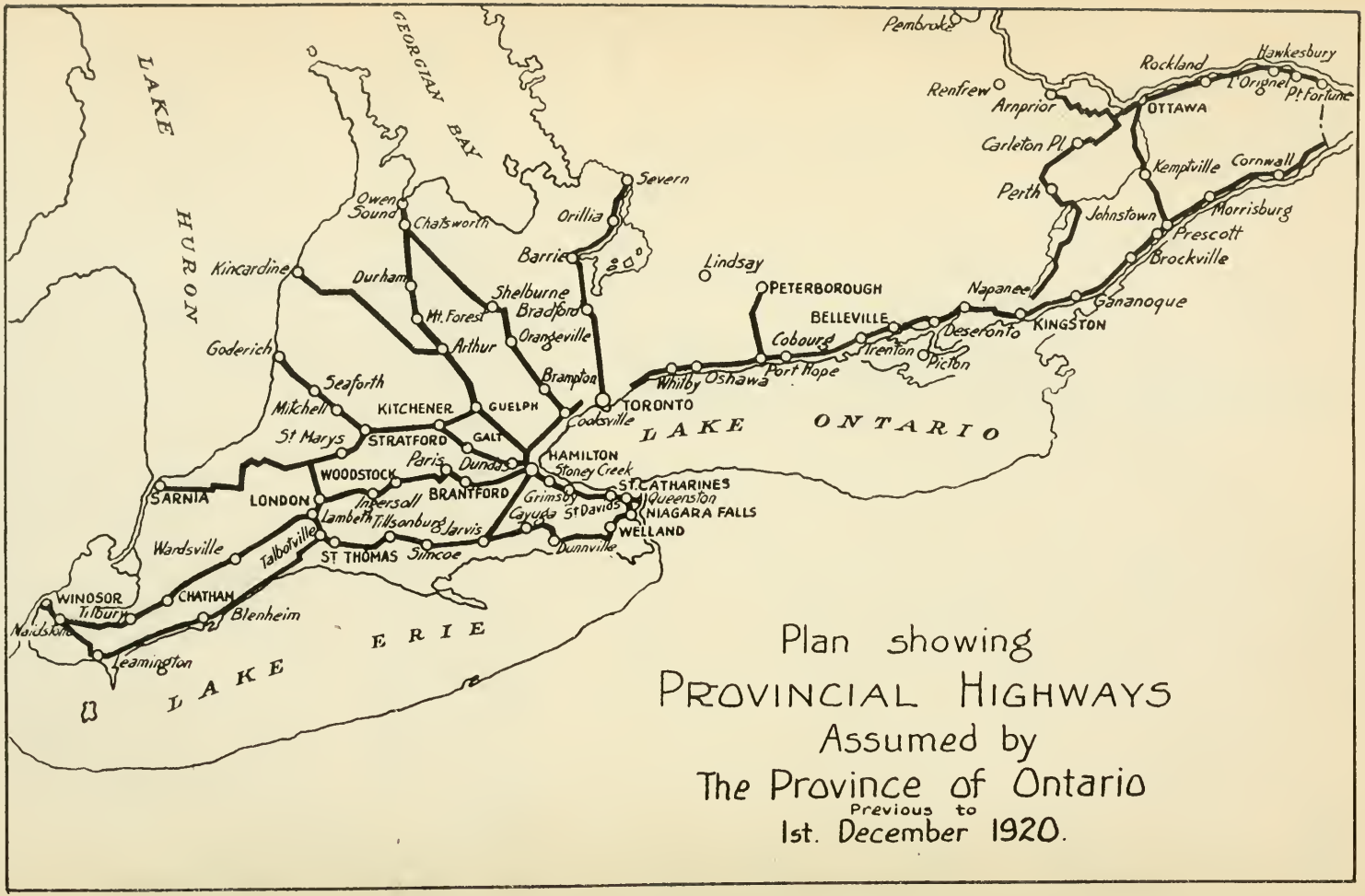

LAKE HURON
GEORGIAN BAY
LAKE ONTARIO
LAKE ERIE
Pembroke
Renfrew
Arnprior
Rockland
Hawkesbury
L'Orignal
Pt. Fortune
OTTAWA
Carleton Pl.
Perth
Kemptville
Cornwall
Johnstown
Morrisburg
Prescott
Brockville
Gananoque
Napanee
Deseronto
KINGSTON
BELLEVILLE
Trenton
Picton
Cobourg
Port Hope
PETERBOROUGH
Lindsay
Severn
Orillia
Barrie
Owen Sound
Chatsworth
Kincardine
Durham
Shelburne
Bradford
Mt. Forest
Arthur
Orangeville
Goderich
Seaforth
Mitchell
KITCHENER
GUELPH
Brampton
Whitby
Oshawa
TORONTO
Toronto
St. Marys
STRATFORD
GALT
Paris
Dundas
HAMILTON
Stoney Creek
WOODSTOCK
Ingersoll
BRANTFORD
Grimsby
St. CATHARINES
Queenston
NIAGARA FALLS
St. Davids
SARNIA
LONDON
Lambeth
Tillsonburg
Jarvis
Cayuga
WELLAND
Dunnville
Wardsville
Talbotville
ST. THOMAS
Simcoe
WINDSOR
Tilbury
CHATHAM
Blenheim
Maidstone
Leamington
Plan showing
Provincial Highways Assumed
in the Province of Ontario
in 1920.

	Date of Designation	Municipality	Mileage	Mileage
Wellington	July 8th	Arthur	17.22	
	" "	Peel	8.09	
	" "	Maryborough	3.76	
	" "	Minto	12.12	
	" "	Clifford Village	1.00	
	July 15th	Nichol	11.73	
	" "	Guelph	5.85	
	" "	Puslinch	10.50	
	July 29th	Guelph	5.00	
	November 10th	Harriston	1.19	
	" "	Arthur	1.46	
				77.92
Wentworth	July 8th	Glanford	6.27	
	" "	Barton	3.13	
	" "	Flamboro West	10.45	
	" "	Flamboro East	7.27	
	" "	Ancaster	2.74	
	" "	Beverley	11.95	
	" "	Waterdown Village	.60	
				42.41
Welland	August 25th	Wainfleet	13.85	
	" "	Crowland	1.78	
	" "	Thorold	8.30	
	" "	Stamford	4.20	
	October 13th	Stamford	3.31	
	" "	Niagara Falls	.11	
				31.55
York	June 24th	York	4.45	
	" "	Markham	4.10	
	" "	Vaughan	4.10	
	" "	King	5.46	
	" "	Whitchurch	3.90	
	" "	Gwillinbury East	5.20	
	July 29th	Etobicoke	1.90	
	October 6th	Scarborough	4.20	
				33.31
		TOTAL NO. MILES.....		1,177.15

The System of Provincial Highways, as on November 30th, 1920, and including all additions to the designated roads, is as shown on Map No. 3.

Proper supervision of the work of construction and maintenance of the roads designated required the appointment of additional staff composed of Resident Engineers and Assistants. As fast as the roads were designated, they were assigned in lengths of from eighty to one hundred or more miles, depending on circumstances, to the men placed in charge and headquarters were opened at towns and cities situated at convenient points on the various Highways. In this manner, immediate supervision of the roads was undertaken and the work of bringing up the general standard of road surface vigorously prosecuted.

From time to time, in the early months of the year, Conferences were held at which a program of work for the construction season was mapped out. Plans were matured for the improvement of sections requiring immediate attention and portions of the roads, which were notoriously bad and constituted breaks in the continuity of the System, were marked for improvement. To carry on the increased amount of work, additional earth moving equipment such as plows, drags, scrapers, wheel scrapers, graders and steam shovels, was advertised for, and contracts let for the supply of all necessary machinery early in spring season. Contracts for the supply of a quantity of crushed stone to be placed at various points were let early in the year, together with contracts for the building of culverts and bridges, the filling in of narrow roads across swamps, the grading of important and dangerous sections and the macadamizing of those portions requiring a new surface, so that when spring arrived, large gangs of men commenced work at a time when full advantage could be taken of the entire construction season. From the year 1914 till 1920, expenditures on roads had been almost entirely stopped while heavy traffic over the roads had greatly increased, and all surfaces were, as a result, in a deplorable condition. We were faced with the urgent necessity of having to quickly catch up wih six years of neglect in order to protect the investment made in the roads as they



Plan showing
PROVINCIAL HIGHWAYS
Assumed by
The Province of Ontario
Previous to
1st. December 1920.

existed, and our early preparations were made with a view to giving close attention to the surface of the entire system so as to make travel safe, convenient and comfortable as soon as possible.

In many localities, the people had indicated their approval of the new width of Provincial Highway road allowance, eighty-six feet between fences, and options had been secured on much of the land to be added to the Highway to increase the width in accordance with the plan. Old fences placed on the limits of the original road allowance and in some cases encroaching on the original width, were in existance and to take full advantage of the new width so as to excavate ditches and construct the sub-grade, it was necessary that the old fences be moved. At points where all arrangements were completed, the fences were moved and in the entire season forty and one-half miles of fence had been set on the limits of the widened highway.

Many telephone, telegraph and power companies had lines of poles along the highways and the poles had been placed so as to avoid running the wires close to trees. This resulted in many poles being within the travelled portion of the road and dangerous to the public. Wherever grading operations were carried on, it was desirable to move all poles out of the way of the men and relocate the lines in the position allotted for such services. During the year, 57.3 miles of poles were moved to proper position on Provincial Highway Cross Section.

Old types of timber culvert construction were found everywhere on roads assumed and in many cases, decay had seriously reduced the strength of the structures, necessitating immediate renewal. Practically nowhere did we find culverts or other structures of adequate strength or permanency to justify leaving them in the new roadway and much rebuilding and replacement was necessary. Wherever the roadway was regraded, all structures were renewed so that the completed highway, after settlement had taken place, would require no further work to provide a secure foundation for a gravel roadway or macadam or other type of pavement. In all, 697 culverts and 16 bridges were built.

Construction was also commenced on three bridges to provide for the combined Toronto-Hamilton Highway, Guelph Road, Dundas Street and Waterdown Road entrance into the City of Hamilton. There will thus be provided into that city a splendid high level scenic roadway with no grades and only a few easy curves replacing three narrow roads which, at present, have very heavy dangerous grades, sharp turns and obscured vision, which makes the approach to Hamilton dreaded by many travellers.

On taking over Provincial Highways, examinations are made to determine which sections require specific work to be performed to make the road passable. Proper drainage of the roadway cannot be secured until the grading and ditching operations are completed and once a good earth subgrade properly drained is secured, a gravel road can be built with a minimum quantity of gravel. Without adequate ditches, the roads become flooded with water, rendering them impassable in spring and fall, while the same road with a good ditch, never becomes obstructed by water or dangerous ice conditions, and is passable at practically all ordinary seasons. The open side ditch is a wonderful aid to the road because it lowers the level of the ground water under the surface of the Highway and by drying up the ground, produces a hard surface upon which gravel, crushed stone, or a pavement can be safely placed. Almost everywhere, this drying up of the subgrade reduces the cost of roadbuilding by requiring small quantities of gravel or stone to produce a fine surface.

In all, two hundred and five and three-quarters miles of road were graded during the year.

Gravel is found very convenient to much of the Provincial Highway and a well drained and surfaced gravel road is economical and very satisfactory. Wherever traffic conditions are light enough to permit a gravel surface to be used, every effort is made to at once secure local gravel pits with which to maintain the highway. Experience has shown that a thin layer of new gravel spread two or three inches thick over the old road and carefully dragged produces a surface that is smooth and permits a large mileage to be built, and if small isolated sections require additional material, their requirements can be met and the fast progress maintained. Numerous gravel pits having an area of from one to five and more acres each and situated convenient to the highways were purchased during the year and enabled us to maintain 759.8 miles, and to build 195.2 miles of gravel road. The width of gravel spread was usually eight feet for single track maintenance and sixteen feet to twenty feet where grading operations were completed and full width could be obtained. From an examination of the Provincial Highways, it would seem possible that good gravel roads would provide, at small expenditure, an ideal surface for many years to come.

The Provincial Highways in many parts are located close to large deposits of rock, and in such cases, gravel is difficult to secure. Many sections of road close to cities carry

Heavy Stone Base on the Grimsby-St. Catharines Highway.

such heavy traffic that a stronger road than that produced by gravel is necessary. In such cases, quarries are secured, a crusher installed and crushed rock produced to build a macadam base course, or a finished macadam road, as the case requires. Where a road has had a new earth grade built, traffic must be carried during and after construction, but the earth in wet weather is useless as a road metal so that recourse must be had to travel or crushed stone to provide a surface that will carry vehicles. Settlement of earth embankments is always to be anticipated and it is folly to build a completed road on top of a new grade so that in certain sections, where traffic conditions will eventually require a strong road, preparations are made by completing the grading and then laying a base course of large crushed stone or field stone. This base course is built as smooth as possible so a to carry traffic and is placed for full pavement width of twenty or twenty-two feet, and a depth of five or six inches, so that in a few years when settlement has stopped and all soft spots in the road have been corrected, a final surface can be laid with the assurance that it will not fail due to defects in the subgrade. In all, 92.35 miles of macadam base were laid during the year.

In some localities, a finished macadam surface could be constructed because of the fact that the old road was of sufficient width and there was in place a proved foundation able to support a finished surface so that 24 miles of such surface was completed and thirteen and three-quarters of old macadam road maintained by application of crushed stone under careful maintenance methods.

Maintenance of macadam and gravel roads involved the application of thin coats of tar or oil, followed by spreading coarse sand or stone chips in order to bind and seal the surface, prevent dusty conditions and prevent automobiles tearing up the roads. This treatment was given to 175 miles of roads.

Macadam Penetration pavements, consisting of a properly graded surface of crushed stone into which hot tar or asphalt is forced under pressure, were constructed east of Beamsville for a distance of three and one-quarter miles, also 6.4 miles in Prescott and Russell Counties under contracts let by the County and taken over by the Department.

One contract for concrete pavement was let from the City of Brantford easterly and one and one-half miles were finished before work closed down. Work was greatly delayed due to shortage of cement.

One contract for Asphaltic Concrete surface was let westerly from Hamilton and the length of miles was completed well before cold weather set in.

Tabulation of work done by Counties with summary is as follows:

County	Miles of fencing moved.	Miles of poles moved.	Number of culverts built.	Number of bridges constructed.	Miles of grading.	Miles of gravelling.	Miles of gravel maintenance.	Miles of macadam base laid.	Miles of macadam pavement.	Miles of bituminous macadam.	Miles of asphaltic concrete.	Miles of concrete paving.	Clay Road maintained.
Lincoln	....	....	57	1	2.5	....	....	9.7	1.75	3.25	....	....	....
Brant	....	....	38	....	5	....	9	2	....	....	....	1.5	....
Haldimand	....	....	23	....	9.8	....	....	....	4.5	....	....	....	....
Middlesex	....	....	7	1	.....	17	57	....	....	....	....	....	....
Elgin	....	....	....	....	.....	....	58	....	....	....	....	....	....
Essex	....	....	....	....	.....	9.4	59.3	....	....	....	....	....	....
Norfolk	....	....	....	....	3	....	30	....	....	....	....	....	....
Welland	1	....	....	....	1	....	....	1	....	....	....	....	....
Oxford	....	1	14	1	7	14.8	26	.25	....	....	....	....	....
Kent	....	....	....	....	5	13.7	88	....	....	....	....	....	....
Ontario	....	8.6	19	1	10.7	1.0	....	8	....	.25	....	....	....
Durham and Northumberland	10	12	92	4	34	50	80	....	....	....	....	....	....
Peterboro	....	....	....	....	5	....	8	....	....	....	....	....	....
Hastings	2	....	25	2	20	6.2	15	....	4.2	....	....	....	....
Lennox and Addington	1	3.7	21	1	3.1	....	....	....	5.6	....	....	....	....
Frontenac	5	44	....	....	4.6	....	....	5.4	7.7	....	....	....	....
Leeds and Grenville	17	2	165	2	34.3	10.2	28	19.3	....	....	....	....	....
Stormont and Glengarry	2.5	....	112	....	14	2.5	2	18.7	....	....	....	....	....
Carleton	3	....	76	3	23	17.8	32	15.5	....	....	....	....	....
Lanark	....	....	....	....	.....	3	....	....	....	....	....	....	....
Prescott and Russell	....	....	....	....	.....	10.1	....	3.5	....	6.4	....	....	....
Wentworth	....	....	....	....	.5	....	37	3.75	4	....	.5	....	....
Middlesex	....	....	....	....	6	1	10	....	....	....	....	....	....
Dufferin	....	....	....	....	.....	....	9.5	....	....	....	....	....	....
Perth	....	....	....	....	1.75	2	7	1.5	.25	....	....	....	....
Waterloo	....	....	....	....	1.5	4	10	1.25	....	....	....	....	....
Lambton	....	....	....	....	.....	3	10	....	....	....	....	....	....
Grey	....	....	....	....	2	11	58	....	....	....	....	....	....
Peel	....	....	....	....	.....	....	29	.5	9.75	....	....	....	....
Halton	....	....	....	....	1	....	4	....	....	....	....	....	14.5
Wellington	....	....	....	....	.5	12	20	....	....	....	....	....	....
Huron	....	....	....	....	2	3	6	....	....	....	....	....	....
York	....	....	4	....	6	.5	27	2	....	....	....	....	....
Simcoe	....	....	....	....	2.5	3	30	....	....	....	....	....	....
Bruce	....	....	....	....	.....	....	10	....	....	....	....	....	....
Totals	41.5	71.3	653	16	205.75	195.2	759.8	92.35	37.75	9.90	.5	1.5	14.5

Bridges Completed

Name	Span
Rouge	652″ 0″
Pickering	120″ 0″
Bowmanville	64″ 0″
Wilmot Creek	40″ 0″
Gages Creek	54″ 0″
Massies Bridge	35″ 0″
Grafton	38″ 0″
Shannonville	80″ 0″
Marysville	48″ 0″
Sucker	44″ 0″
Kaylers	50″ 0″
Odessa	44″ 0″
Aux Raisin	170″ 0″
Johnstown Creek	26″ 0″
Spencerville	72″ 6″
North Gower	60″ 0″
Carsonby	35″ 0″
Mud Creek	37″ 6″
Jack River	80″ 0″
Red Hill	40″ 0″
Thamesford	75″ 0″
Dotey's Creek	80″ 0″

Respectfully submitted,

GEO. HOGARTH,
Engineer of Highways.

Toronto, February 17th, 1921.

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Sir:—

I submit herewith a report of the principal operations undertaken by the Department of Forestry during the year 1920.

INSPECTION OF TREE GROWTH

The duty first undertaken by the Forester was to make a trip over the Provincial Highways upon which, at the time of his appointment, work had been started, or had been finished. This was done in order to ascertain the approximate percentage of existing tree growth and to determine localities to be planted with trees during the Fall.

It was found that no more than 25 per cent. of the total length of highways was lined by trees, and that some of this tree growth was unsatisfactory; the trees in many cases being too closely spaced, out of alignment, or the lines were too near the roadway for safety, or too near the location of the ditches to be preserved. Some of the avenues were however magnificent as were individual trees here and there.

PRUNING OF TREES

During the inspection of the trees, in company with the various Divisional and Resident Engineers, the matter of the preservation of the trees was discussed, and also the necessary work of pruning by the various telephone, telegraph and power companies. Satisfactory arrangements for the pruning and preservation of the trees were made. It was decided that only where construction operations rendered it imperative to remove a tree, that this should be done.

In regard to the pruning of trees the Forester, through the Superintendent or other officials of the companies concerned, got in touch with the various line foremen and instructed them in the pruning of trees during October. In some cases the Forester stayed until the work was finished. The various companies paid for the labour and the trees were, wherever possible, left in a symmetrical shape, or in such a shape as to be later symmetrically pruned by the Department.

In connection with the pruning of trees the Forester visited Prescott on October 5th, and on the 6th inspected trees as far as Morrisburg in company with Mr. Rayside, the Superintendent of Construction of the Bell Telephone Company, Eastern Division, Montreal. Arrangements were made whereby co-operation in the matter of pruning trees was established to the satisfaction of all parties.

On October 9th, co-operation between the Bell Telephone Company, on the Brantford and Hamilton Highway was effected, through Mr. Ross, of Hamilton. On October 15th, between Toronto and Newmarket, through Mr. Gardener, the Plant Chief, and on November 2nd, between St. Thomas and Dutton, through Mr. Heard, the Plant Chief. On September

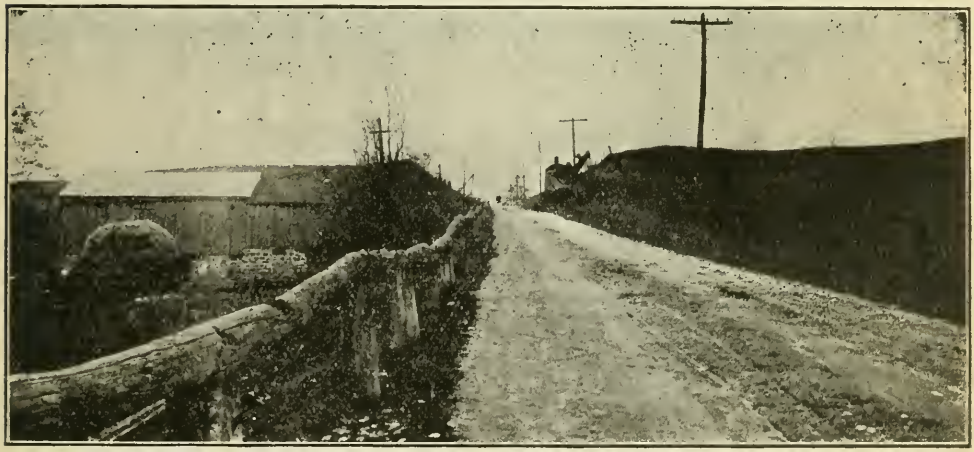
15th, Mr. K. Wildern, Plant Chief, Bell Telephone Company, requested to be taken over the highway between St. Catharines and St. Davids, with a view to clearing the wires. This was done and arrangements were made for the Company to do the necessary pruning.

During October and November requests were received from the Hydro-Electric Power Commission to be allowed to prune trees at St. Davids on the Queenston-Hamilton Highway, and between Bullock's Corners and Christy's Corners on the Dundas-Galt Highway, Representatives of the Commission were met on the ground and satisfactory arrangements made. In the latter case one hundred trees were pruned, about 75 of these being 30 years to 75 years old.

During November the Great Northwestern Telegraph Company re-located their line between Hamilton and Binkley's Corner, in this case also the Company entered into co-operation and the necessary work was carried out to the satisfaction of all concerned.

In the course of the work which extended over many weeks, not a single unpleasant incident marred the harmony which existed between the Department and the Companies in question, each co-operated with the other with the desire to save the trees, which were cut with a minimum of injury.

The matter of the appointment of an expert tree pruner was discussed with the representatives of the forementioned companies—that is—a tree pruner for each company, a man who would be expert enough to satisfactorily supervise all pruning along their respective lines. From the kindly manner in which the suggestion was received it may be assumed that such an appointment will materialize sooner or later. Were such appointments effected by the Bell Telephone Company, or the Hydro-Electric Power Commission, tree lovers would certainly not raise the objection to necessary pruning being done, and what at present with many private owners of trees, is a disagreeable situation, would be materially relieved. For this co-operation Mr. Hugill, of the Hydro-Electric Commission; Mr. Duckworth, of the G.N.W. Telegraph Company, and Messrs. Rayside, Ross, Leitch, Gardner and Wildern, of the Bell Telephone Company, are to be thanked.



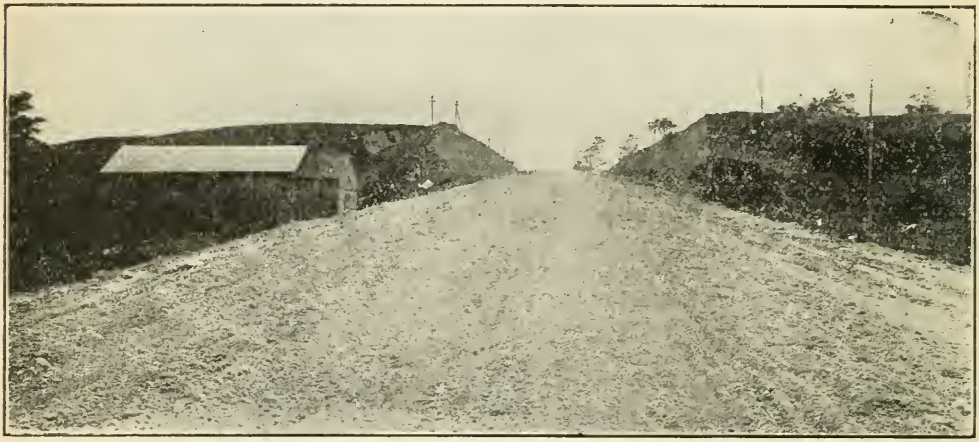
Rowe's Hill Before Improvement.

LAYING OUT PARKS

A study was made of various areas at intersections of roadways with a view to their beautification, and with this object in view various plans are now in course of preparation. In the case of the area at the intersection of the Provincial Highway to Port Hope and the Road to Canton, and known as Welcome Corner, a plan was prepared and the area planted as a park.

At the intersection of the Provincial Highway and Burnham Street at Cobourg, a small area was ploughed in readiness to be planted in Spring, a plan of this is now finished.

Pleasant incidents have marked the progress of the work of beautification. Residents of the municipalities in which the work has been done have asked to be allowed to donate beds of flowers and have promised to maintain the areas. This in itself is a source of the greatest satisfaction.



Rowe's Hill Widened and With Adequate Drainage.

PLANTING TREES ALONG THE HIGHWAYS

During the fall and early winter months, tree planting was commenced on the Kingston Road between Newcastle and Port Hope. Approximately thirteen miles were planted comprising two and three-quarter miles in Pickering Township, from the Rouge Bridge easterly to Pickering. Eight and one-half miles in Clarke Township, from a point one mile west of Newcastle and extending easterly through Newtonville, one and three-quarter miles in Hope Township, beginning a short distance west of Welcome Corner to Port Hope. The total number of trees planted was 1,832,—1,400 Hard or Sugar Maples, 418 White Elms and 14 White Ashes. The first tree was planted on October 22nd, in Clarke Township. This tree should have historic worth as time goes on.

In the various low lying areas which through bad drainage were suited only for the growth of such trees as Elms and Ashes, these were planted thus ensuring avenues which will remain unbroken, where otherwise losses might have occurred. Through the swamp land, west of Newtonville, Elms were planted, the avenue extending three-quarters of a mile.

REMOVING SIGNS FROM TREES

Work of a very important nature was that of removing the signs from the trees. In many cases considerable injury had been effected by people driving nails into valuable trees to support signs along the highways. This was, however, not the only drawback, for it was found upon the removal of these signs that they harboured insect pests, such as the Tussock and other moths, as their nests could be hidden from the light. In one case over one hundred of these pests were discovered between a single sign and the trunk of a tree. It required but little explanation to satisfy the owners of the signs that the practice of nailing these to the trees was wrong and many of them graciously promised to desist from the practice.

INSPECTING GRAVEL PIT AND QUARRY AREAS

During the summer at various times the Highway Forester visited some of the gravel pit and quarry areas with a view to ascertaining their suitability for reafforestation, or for the growing of trees for roadside planting. It was found that the old C.P.R. gravel pit at Newtonville offers a splendid chance for reforesting with some of the pines. This large area, about thirty acres, being located right along the Provincial Highway, and as its entire area may be seen by tourists, it would appear that no finer spot exists for the purpose in question. A large portion of the area from which the gravel has not been taken is a light sandy loam, this about ten acres in extent touches the highway. The remainder, about twenty acres, from which much gravel has been taken is composed of gravel sand, and some loam. Upon this the growth of pines would perhaps be slow, but it is almost certain they would grow to a commercial size.

In conversation with Mr. E. J. Zavits, the Provincial Forester, this gentleman promised to assist your Department and offered to supply 5,000 pine seedlings, during the spring of 1921. In subsequent years considerably larger numbers would be given for reafforestation purposes. This spirit of co-operation will in the future mean much and will enable your Department to quickly cover with tree growth, and to put to profitable use the areas under its control, areas which would otherwise appear barren and worthless.

The Department quarry area at Hamilton, comprising about eighty acres, was also inspected. This area offers facilities either as a reafforestation project or for nursery purposes. Upon it trees and shrubs for highway beautification could be grown. This nursery would largely serve the Western Division, and in conjunction with a Northern and Eastern nursery suitably located, would adequately meet the needs of the Department.

CO-OPERATION OF PUBLIC BODIES

During the year members of many Municipal Councils, Chambers of Commerce and Horticultural Societies expressed a desire to help with the work of Highway Beautification. Several individuals promised to cut the grass and weeds in front of their property and to try and induce others to do so, and so help to maintain a state of neatness along the Highways.

The Sarnia Chamber of Commerce placed itself on record as being the first organization to offer to co-operate with your Department, and its services are at your disposal in all matters pertaining to the beautification of the approaches to the city. Organizations in St. Catharines, St. Thomas and other towns and cities have likewise promised to support the work.

Respectfully submitted,

H. J. MOORE,
Forester.

Motor Vehicles Branch

Report of Registrar of Motor Vehicles.

W. A. McLean, Esq.,
Deputy Minister of Highways,
Ontario.

Sir,—I have the honour to submit the following statistics of the permits and licenses issued by the Motor Vehicles Branch during the year 1920.

These statistics show in detail the number of passenger cars, commercial vehicles, motorcycles and chauffeurs located in each City and County, as well as the occupations of the owners and the horse-power, carrying capacity and other descriptions of the vehicles registered.

Respectfully submitted,

J. P. BICKELL,
Registrar of Motor Vehicles.

PASSENGER CARS IN ONTARIO IN 1920

Counties.		Cities.		Total.
Algoma	568	Sault Ste. Marie	939	1,507
Brant	1,455	Brantford	1,279	2,734
Bruce	3,030	.....	.....	3,030
Carleton	1,402	Ottawa	3,267	4,669
Dufferin	1,452	.....	.....	1,452
Dundas	1,166	.....	.....	1,166
Durham	1,391	.....	.....	1,391
Elgin	2,555	St. Thomas	963	3,518
Essex	5,134	Windsor	2,614	7,748
Frontenac	1,146	Kingston	1,004	2,150
Glengarry	530	.....	.....	530
Grenville	672	.....	.....	672
Grey	2,899	Owen Sound	630	3,529
Haldimand	2,050	.....	.....	2,050
Haliburton	119	.....	.....	119
Halton	1,689	.....	.....	1,689
Hastings	3,039	Belleville	668	3,707
Huron	3,429	.....	.....	3,429
Kenora	55	.....	.....	55
Kent	4,966	Chatham	1,220	6,186
Lambton	3,037	Sarnia	803	3,840
Lanark	1,519	.....	.....	1,519
Leeds	2,229	.....	.....	2,229
Lennox and Addington	1,342	.....	.....	1,342
Lincoln	1,623	St. Catharines	973	2,596
Manitoulin	426	.....	.....	426
Middlesex	3,937	London	3,049	6,986
Muskoka	455	.....	.....	455
Nipissing	579	.....	.....	579
Norfolk	2,068	.....	.....	2,068
Northumberland	1,990	.....	.....	1,990
Ontario	3,035	.....	.....	3,035
Oxford	2,973	Woodstock	490	3,463
Parry Sound	503	.....	.....	503
Peel	1,845	.....	.....	1,845
Perth	2,579	Stratford	783	3,362
Peterboro	1,227	Peterboro	949	2,176
Prescott	712	.....	.....	712
Prince Edward	1,370	.....	.....	1,370
Rainy River	356	.....	.....	356
Renfrew	1,652	.....	.....	1,652
Russell	455	.....	.....	455
Simcoe	4,464	.....	.....	4,464
Stormont	1,281	.....	.....	1,281
Sudbury	803	.....	.....	803
Thunder Bay	158	Fort William	663	821
		Port Arthur	519	519
Temiskaming	360	.....	.....	360
Victoria	1,949	.....	.....	1,949
Waterloo	2,373	Kitchener	1,142	3,715
		Galt	734	734
Welland	2,563	Welland	656	3,019
		Niagara Falls	1,095	1,095
Wellington	2,408	Guelph	817	3,225
Wentworth	2,220	Hamilton	5,771	7,991
York	4,455	Toronto	26,798	31,253
Foreign	.....	.....	.....	342
				155,861

OCCUPATIONS OF OWNERS

Passenger Cars

Farmers	57,429	
Business	16,741	
Tradesmen	21,389	
Professional	5,894	
Manufacturers	4,215	
Doctors	4,011	
Firms	1,872	
Liverymen	3,879	
Commercial Travellers	3,760	
Agents	4,497	
Real Estate Agents	1,094	
Insurance Agents	1,074	
Contractors	2,486	
Undertakers	335	
Laborers	2,344	
Managers and Foremen	6,539	
Police	219	
Drovers	596	
Unclassified	7,512	
Unoccupied	8,907	
Municipal Corporations, etc.	394	
Private Corporations, etc.	163	
Soldiers	145	
Dominion Government	51	
Ontario Government	178	
Royal Air Force	3	
Military Units	2	
Munitions Board	2	
D.S.C.R.	97	
Department of Militia and Defence	30	
Military Hospitals	3	
		155,861

HORSEPOWERS

Passenger Cars

Fords, 22.5	70,896	
15	192	
16-20	21,899	
21-25	39,781	
26-30	18,569	
31-35	2,367	
36-40	1,401	
41-45	386	
46-50	216	
51-up	25	
Electric	129	
		155,861

COMMERCIAL VEHICLES IN ONTARIO IN 1920

Counties.		Cities.		Total.
Algoma	35	Sault Ste. Marie	109	144
Brant	85	Brantford	237	322
Bruce	78	.....	.....	78
Carleton	58	Ottawa	639	697
Dufferin	27	.....	.....	27
Dundas	30	.....	.....	30
Durham	42	.....	.....	42
Elgin	12	St. Thomas	106	118
Essex	449	Windsor	518	967
Frontenac	50	Kingston	123	173
Glengarry	5	.....	.....	5
Grenville	35	.....	.....	35
Grey	122	Owen Sound	5	127
Haldimand	69	.....	.....	69
Haliburton	2	.....	.....	2
Halton	169	.....	.....	169
Hastings	96	Belleville	96	192
Huron	106	.....	.....	106
Kenora	15	.....	.....	15
Kent	120	Chatham	151	271
Lambton	122	Sarnia	97	219
Lanark	23	.....	.....	23
Leeds	100	.....	.....	100
Lennox and Addington	56	.....	.....	56
Lincoln	244	St. Catharines	250	494
Manitoulin	5	.....	.....	5
Middlesex	152	London	520	672
Muskoka	21	.....	.....	21
Nipissing	45	.....	.....	45
Norfolk	77	.....	.....	77
Northumberland	99	.....	.....	99
Ontario	200	.....	.....	200
Oxford	122	Woodstock	76	198
Parry Sound	18	.....	.....	18
Peel	137	.....	.....	137
Perth	88	Stratford	73	161
Peterboro	56	Peterboro	115	171
Prescott	30	.....	.....	30
Prince Edward	64	.....	.....	64
Rainy River	20	.....	.....	20
Renfrew	66	.....	.....	66
Russell	14	.....	.....	14
Simcoe	191	.....	.....	191
Stormont	39	.....	.....	39
Sudbury	72	.....	.....	72
Thunder Bay	19	Fort William	137	156
		Port Arthur	69	69
Temiskaming	56	.....	.....	56
Victoria	86	.....	.....	86
Waterloo	141	Kitchener	173	314
		Galt	90	90
Welland	215	Welland	96	311
		Niagara Falls	164	164
Wellington	62	Guelph	114	176
Wentworth	281	Hamilton	943	1,224
York	670	Toronto	5,536	6,206
Foreign	.....	.....	.....	571
				16,204

OCCUPATIONS

Farmers	1,273	
Business	3,188	
Tradesmen	636	
Professional	51	
Manufacturers	547	
Doctors	35	
Firms	6,243	
Liverymen	274	
Commercial Travellers	37	
Agents	122	
Real Estate Agents	13	
Insurance Agents	9	
Contractors	2,104	
Undertakers	223	
Labourers	76	
Managers and Foremen	79	
Police	16	
Drovers	14	
Unclassified	264	
Unoccupied	155	
Municipal Corporations, etc.	314	
Private Corporations, etc.	281	
Soldiers	1	
Dominion Government	43	
Ontario Government	122	
Royal Air Force	1	
Military Units	1	
Munition Board	.....	
D.S.C.R.	21	
Department Militia and Defence	61	
Military Hospital	.....	
		16,204

TONNAGE OF COMMERCIAL VEHICLES

½	5,313	
1	8,163	
1½	895	
2	884	
2½	155	
3	209	
3½	294	
4	59	
4½	12	
5	196	
5½	7	
6	6	
6½	7	
7	3	
up	1	
		16,204

Gasoline	16,158	
Electric	45	
Steam	1	
		16,204

Original	5,139	
Renewal	11,065	
		16,204

Delivery	3,514	
Trucks	12,298	
Ambulance	86	
Hearse	198	
Casket Wagons	26	
Patrols	13	
Fire Apparatus	69	
		16,204

MOTORCYCLES

Counties.		Cities.		Total.
Algoma	5	Sault Ste. Marie	64	69
Brant	29	Brantford	50	79
Bruce	16	.....	.....	16
Carleton	38	Ottawa	186	224
Dufferin	11	.....	.....	11
Dundas	6	.....	.....	6
Durham	19	.....	.....	19
Elgin	12	St. Thomas	24	36
Essex	72	Windsor	63	135
Frontenac	9	Kingston	42	51
Glengarry	2	.....	.....	2
Grenville	5	.....	.....	5
Grey	31	Owen Sound	13	44
Haldimand	14	.....	.....	14
Haliburton	1	.....	.....	1
Halton	35	.....	.....	35
Hastings	13	Belleville	21	34
Huron	35	.....	.....	35
Kenora	3	.....	.....	3
Kent	29	Chatham	27	56
Lambton	29	Sarnia	20	49
Lanark	14	.....	.....	14
Leeds	26	.....	.....	26
Lennox and Addington	11	.....	.....	11
Lincoln	44	St. Catharines	40	84
Manitoulin	1	.....	.....	1
Middlesex	55	London	145	200
Muskoka	5	.....	.....	5
Nipissing	10	.....	.....	10
Norfolk	25	.....	.....	25
Northumberland	18	.....	.....	18
Ontario	75	.....	.....	75
Oxford	52	Woodstock	18	70
Parry Sound	4	.....	.....	4
Peel	41	.....	.....	41
Perth	33	Stratford	54	87
Peterboro	9	Peterboro	29	38
Prescott	4	.....	.....	4
Prince Edward	23	.....	.....	23
Rainy River	11	.....	.....	11
Renfrew	30	.....	.....	30
Russell	4	.....	.....	4
Simcoe	64	.....	.....	64
Stormont	11	.....	.....	11
Sudbury	13	.....	.....	13
Thunder Bay	3	Fort William	29	32
		Port Arthur	26	26
Temiskaming	25	.....	.....	25
Victoria	19	.....	.....	19
Waterloo	70	Kitchener	65	135
		Galt	46	46
Welland	81	Niagara Falls	55	55
		Welland	50	131
Wellington	25	Guelph	33	58
Wentworth	62	Hamilton	290	352
York	289	Toronto	2,532	2,821
Foreign	.....	.....	.....	3
				5,496

CHAUFFEURS

Counties.		Cities.		Total.
Algoma	101	Sault Ste. Marie	261	362
Brant	68	Brantford	206	274
Bruce	131		.....	131
Carleton	83	Ottawa	749	832
Dufferin	28		.....	28
Dundas	41		.....	41
Durham	96		.....	96
Elgin	46	St. Thomas	151	197
Essex	261	Windsor	582	843
Frontenac	45	Kingston	148	193
Glengarry	28		.....	28
Grenville	54		.....	54
Grey	164	Owen Sound	144	308
Haldimand	66		.....	66
Haliburton	15		.....	15
Halton	93		.....	93
Hastings	211	Belleville	137	348
Huron	265		.....	265
Kenora	12		.....	12
Kent	158	Chatham	190	348
Lambton	82	Sarnia	119	201
Lanark	121		.....	121
Leeds	195		.....	195
Lennox and Addington	99		.....	99
Lincoln	68	St. Catherines	260	328
Manitoulin	55		.....	55
Middlesex	96	London	707	803
Muskoka	70		.....	70
Nipissing	98		.....	98
Norfolk	57		.....	57
Northumberland	232		.....	232
Ontario	272		.....	272
Oxford	177	Woodstock	92	269
Parry Sound	62		.....	62
Peel	37		.....	37
Perth	101	Stratford	77	178
Peterboro	67	Peterboro	161	228
Prescott	49		.....	49
Prince Edward	84		.....	84
Rainy River	55		.....	55
Renfrew	70		.....	70
Russell	8		.....	8
Simcoe	345		.....	345
Stormont	65		.....	65
Sudbury	143		.....	143
Thunder Bay	1	Fort William	112	113
		Port Arthur	69	69
Temiskaming	99		.....	99
Victoria	140		.....	140
Waterloo	105	Kitchener	145	250
		Galt	90	90
Welland	249	Welland	142	391
		Niagara Falls	224	224
Wellington	56	Guelph	102	158
Wentworth	79	Hamilton	1,393	1,472
York	346	Toronto	7,472	7,818
Foreign	.....		.....	81
				19,563

APPENDIX

EXPENDITURE ON CONSTRUCTION

(Exclusive of Provincial

The following Schedule shows in detail the work and approved expenditure on construction

County	Work Done During Year.							Roads and Culverts
	Graded Miles	Miles Stoned	Miles Gravelled	Tile Drain	Bridges	Dredges	Pipe and Tile Culverts	
Brant	1.				1	17		$6,056.38
Bruce	1.				2	21	2	9,016.71
		Asp. Con. 2.69						
Carleton	13.25	10.83	21.05	626.	4	86	14	301,258.97
Dufferin		.80	1.0	12.12	9	115	4	22,203.65
Elgin	.09	1.62	.9	36.3	2	52	4	30,442.38
Essex	.31	Con. 3.75	7.50	181.81	2	7	5	175,602.12
Frontenac		4.75			2	27	2	38,047.59
Grey	1.	2.00			8	4	24	36,466.26
Haldimand	14.75	21.25	6.75			49		223,640.35
Halton	3.				1	6	2	1,626.95
Hastings					1			
Huron	1.25		6.50		7		3	29,312.68
Kent		.80		771.	2	12	8	48,612.80
Lambton		.09	1.84	1,240.	3	18	1	7,980.09
Lanark		12.50	.25	60.6	2	38		59,732.30
Leeds and Grenville.		10.05	.05		2	10	1	34,885.38
Lennox and Addington	.50		1.			3		4,413.13
		Bit. Mac. 3.38						
Lincoln	15.50	Con. .75	3.		3	134	22	204,468.41
		11.25						
Middlesex	11.50		9.75	784.36	1	27		32,005.12
Norfolk	4.07		1.49	14.96	2	26	2	41,103.81
Northumberland and Durham			8.12		1	7		10,348.10
Ontario	.45	.31	.06	44.	9	52	9	15,837.34
Oxford	1.50		17.19	6,977.		15		50,056.52
		Bit. Mac. 1.14						
Peel	16.86	2.12	8.03	109.10		39	4	81,904.44
Perth			2.25	582.		8	1	15,012.95
Peterboro						1	3	4,039.44
		Bit. Mac. 7.58						
Prescott and Russell.	27.2	12.10	1.87		7	88	8	317,589.18
Prince Edward	1.75	5.				37	2	40,029.89
Renfrew		2.50	1.		2	7	1	44,062.90
Simcoe		.18			6	64	6	10,652.83
Stormont, Dundas and Glengarry	25.	27.50	.2		1		5	254,854.32
Victoria	4.87	5.12		7.93	3	39	5	24,226.18
Waterloo		Bit. Mac. .22			4	6	13	4,074.44
		Con. .50						
Welland	1.12	Bit. Mac. 2.30		105.		22	12	78,128.16
		2.58						
		Bit. Mac. 1.60						
Wellington	.3	.30	.7	32.		14	8	8,247.71
Wentworth	8.	6.50	3.	78.78	1	12	4	64,237.04
		Bit. Mac. 4.26						
York		Asp. Con. 1.40	8.18		5	35	23	292,848.11
		8.40						
Totals	154.27	* 178.12	111.68	13,144.00	93	1,098	198	2,623.024.63

* Includes:—

147.75 W. B. Macadam
20.48 Bituminous Macadam.
5.80 Concrete.
4.09 Asphaltic Concrete.

No. 1

OF COUNTY ROADS

County Roads)

on County Roads during 1920 upon which Provincial Subsidies were paid during 1921.

				Approved Expenditure for Year					
Bridges	Machinery and Repairs	Special Grants to Towns and Villages	Purchase of Toll Roads and Gravel Pits	Superintendence	Total Approved Expenditure on Construction	Approved Total Expenditure on Maintenance	Approved Expenditure Government Grant	40 per cent Disallowed	Total
$2,799.95	$31,419.37	.....	.....	$4,087.28	$44,362.98	$24,497.41	$68,860.39	$27,544.16	$10.00
10,337.87	20,847.68	$1,680.62	.....	3,899.09	45,781.97	27,339.69	73,121.66	29,248.66	.....
95,950.55	54,059.66	.....	.....	6,840.27	458,109.45	69,173.43	527,282.88	210,913.15	225.00
15,251.99	3,962.98	.....	.....	2,078.47	43,497.09	55,212.26	98,709.35	39,483.74	.....
19,297.64	33,248.75	5,572.63	.....	3,007.65	91,569.05	60,277.80	151,846.85	60,738.74	.....
5,735.67	39,992.99	552.75	.....	3,436.26	225,319.79	29,756.99	255,076.78	102,030.71	4,221.03
44,09.81	10,115.52	.....	.....	1,746.74	54,319.66	32,349.22	86,668.88	34,667.55	.....
37,662.90	5,906.63	.....	.....	2,613.95	82,649.74	60,395.57	143,045.31	57,218.12	.....
.....	7,038.64	4,094.00	.....	2,688.95	237,461.94	8,303.89	245,765.83	98,306.33	3,737.78
7,335.47	3,033.47	.....	.....	1,710.00	13,705.89	14,978.58	28,684.47	11,473.79	.....
8,187.14	13,130.00	.....	.....	5,429.66	26,746.80	66,275.21	93,022.01	37,208.80	.....
20,037.02	15,193.67	42,767.83	.....	3,604.71	110,915.91	65,073.92	175,989.83	70,395.93	1,219.16
10,795.35	4,945.19	.....	.....	3,270.19	67,623.53	31,540.99	99,164.52	39,665.81	3,410.61
10,743.16	38,287.73	4,232.00	.....	2,455.35	63,698.33	36,265.97	99,964.30	39,985.72	806.40
5,137.80	35,630.86	.....	.....	3,484.19	103,985.15	31,742.13	135,727.28	54,290.91	.....
13,307.16	2,712.14	2,148.49	.....	2,876.39	55,929.56	112,090.37	168,019.93	67,207.97	.....
.....	11,282.88	11,048.68	.....	2,093.24	28,837.93	23,779.93	52,617.86	21,047.14	.....
12,114.49	25,538.52	.....	$2,214.16	3,573.35	247,908.93	29,945.68	277,854.61	111,141.84	.....
3,041.70	29,650.29	501.30	.....	3,617.88	68,816.29	103,618.86	172,435.15	68,974.06	.....
4,672.09	32,903.55	2,785.39	.....	3,657.10	85,121.94	34,700.60	119,822.54	47,929.01	.....
5,410.02	6,456.15	17,656.34	.....	2,244.48	42,115.09	50,828.13	92,943.22	37,177.29	.....
25,007.92	11,008.99	6,182.46	.....	3,839.06	61,875.77	42,732.63	104,608.40	41,843.36	.....
.....	13,102.84	7,459.56	.....	1,810.10	72,429.02	27,444.22	99,873.24	39,949.30	6,208.24
.....	1,843.02	.....	.....	2,505.41	86,252.87	31,593.27	117,846.14	47,138.46	12.18
.....	4,083.57	.....	.....	1,470.90	20,567.42	29,790.59	50,358.01	20,143.20	.....
3,769.63	10,349.04	.....	.....	1,530.00	19,688.11	26,288.96	45,977.07	18,390.83	.....
48,046.22	50,670.19	9,275.58	.....	2,784.64	423,365.81	15,223.86	438,589.67	175,435.87	12,025.28
.....	13,462.81	.....	.....	2,477.10	55,969.80	51,240.08	107,209.88	42,883.95	191.35
14,236.76	41,915.33	3,000.00	.....	5,809.68	109,024.67	34,704.13	143,728.80	57,491.52	1,767.88
16,004.81	9,121.05	20,826.94	.....	3,751.50	59,857.13	92,712.43	152,569.56	61,027.82	.....
1,362.86	44,267.40	.....	.....	4,742.81	305,227.39	50,411.43	355,638.82	142,255.53	1,419.85
4,229.36	18,204.25	4,504.68	.....	2,622.50	53,786.97	27,670.10	81,457.07	32,582.83	80.00
21,304.36	12,799.78	6,115.72	.....	2,335.72	46,630.02	39,064.60	85,694.62	34,277.85	130.00
.....	7,104.13	.....	.....	2,349.25	87,581.54	74,251.36	161,832.90	64,733.16	.....
29,487.97	5,918.84	11,488.09	.....	3,077.96	58,220.57	65,049.07	123,269.64	49,307.86	50.00
6,822.00	11,347.11	.....	.....	4,562.33	86,968.48	65,121.65	152,090.13	60,836.05	.....
25,260.63	4,178.08	.....	.....	3,916.44	326,203.26	24,991.39	351,194.65	140,477.86	11,166.03
482,760.30	684,733.10	161,393.06	2,214.16	118,000.60	4,072,125.85	1,666,436.40	5,738,562.25	2,295,424.90	36,680.79

APPENDIX

Expenditure on Construction

The following schedule shows in detail the work and Approved Expenditure on Provincial

County	Work Done During Year.						
	Miles Graded	Miles Stoned	Miles Gravelled	Tile Drain Rods	Bridges	Pipe and Tile Culverts	Other Culverts
Brant	1.	Conc. .41 1.		1,024.		11	2
Bruce	1.25		4.75	172.	12	19	9
Carleton	3.50		0.3		3	4	8
Dufferin		Bit Mac. .3				1	2
Elgin	.05	1.6	.14	252.		5	1
Essex	.37	Conc. 1.89 Bit Mac. .81	1.06	255.			1
Frontenac							
Grey	.25	5.25	5.		1	1	23
Haldimand							
Halton	3.62		2.25		4	4	
Hastings							
Huron					1		
Kent		Con. 1.28		2,141.	1		1
Lambton	.78		1.09	280.	2	31	3
Lanark		Bit Mac. 3.				7	1
Leeds and Grenville							
Lennox and Addington	1.75				1	1	
Lincoln							
Middlesex					1		
Norfolk	0.79	Bit Mac. 2.23				9	
Northumberland and Durham	2.25		4.			44	1
Ontario	1.75					14	4
Oxford							
Peel							
Perth				7,644.	1	1	
Peterboro							
Prescott and Russell	1.75	Bit Mac. 4.25				14	
Prince Edward							
Renfrew		Bit Mac. .7 4.2				19	5
Simcoe	3.	Con. .1 2.	4.5		2	20	
Stormont, Dundas and Glengarry	9.75	24.25			3		7
Victoria	3.75	1.	.25	30.3		15	
Waterloo		Con. 1.75	1.75		1	1	
Welland		Bit Mac. 2.66 2.67			1	1	1
Wellington							
Wentworth	1.50	1.			1		
York		Bit Mac. 3.25 Asp.Con. 2.02 Brick .81		7.27	1	11	14
Totals	34.41	*68.43	25.09	11,871.	35	233	83

* Includes 42.97 miles W. B. Macadam, 17.20 miles Bituminous Macadam, 5.43 miles Concrete, 2.02 miles Asphaltic Concrete, 0.81 miles Brick.

No. 2

on Provincial County Roads.

County Roads during 1920, upon which Provincial Subsidies were paid during 1921.

Roads and Culverts	Bridges	Special Grants to Towns and Villages	Total Approved Expenditure on Construct'n	Total Approved Expenditure on Mainten'nee	Total Approved Expenditure	Gov't Grant
54,168.90	.....	.....	54,168.90	34,590.81	88,759.71	53,255.83
58,794.38	22,849.77	717.10	82,361.25	10,483.38	92,844.63	55,706.78
54,208.80	19,326.29	.....	73,535.09	14,990.75	88,525.84	53,115.50
1,641.78	292.20	.....	1,933.98	1,328.54	3,262.52	1,957.51
25,664.68	1,190.55	2,735.00	29,590.23	24,451.69	54,041.92	32,425.15
103,034.53	.....	.....	103,034.53	18,905.06	121,939.59	73,163.75
.....	.....	.....	.....	14,797.41	14,797.41	8,878.45
132,267.14	2,693.98	.....	134,961.12	16,179.37	151,140.49	90,684.29
.....	.....	3,099.35	3,099.35	3,848.53	6,947.88	4,168.73
14,744.02	84,862.56	.....	99,606.58	3,137.70	102,744.28	61,646.56
.....	.....	.....	.....	74,877.87	74,877.87	44,926.72
.....	10,909.00	.....	10,909.00	14,166.74	25,075.74	15,045.44
42,763.31	12,290.33	.....	55,053.64	7,137.11	62,190.75	37,314.45
6,295.42	12,023.44	1,887.51	20,206.37	13,145.43	33,351.80	20,011.08
89,095.16	.....	.....	89,095.16	10,111.27	99,206.43	59,523.86
.....	.....	.....	.....	.....	.....	.....
2,177.16	1,740.10	.....	3,917.26	33,452.98	37,370.24	22,422.14
.....	.....	.....	.....	.....	.....	.....
.....	957.25	.....	957.25	18,593.97	19,551.22	11,730.74
44,423.02	.....	.....	44,423.02	10,450.79	54,873.81	32,924.29
34,300.00	.....	.....	34,300.00	22,877.47	57,177.47	34,306.48
5,641.74	.....	728.85	6,370.59	19,150.69	25,521.28	15,312.77
.....	.....	.....	.....	12,570.39	12,570.39	7,542.23
.....	48.40	.....	48.40	1,292.03	1,340.43	804.26
2,535.63	988.40	.....	3,524.03	12,012.76	15,536.79	9,322.07
.....	.....	.....	.....	.....	.....	.....
101,630.00	800.00	8,000.00	110,430.00	5,735.15	116,165.15	69,699.09
.....	.....	.....	.....	14,190.00	14,190.00	8,514.00
116,962.26	147.07	.....	117,109.33	2,048.54	119,157.87	71,494.72
31,728.17	3,204.41	9,908.40	44,840.98	21,150.38	65,991.36	39,594.82
285,484.36	7,804.83	.....	293,289.19	30,526.75	323,815.94	194,289.56
15,144.38	.....	.....	15,144.38	8,881.06	24,025.44	14,415.27
38,172.76	5,581.45	.....	43,754.21	5,330.57	49,084.78	29,450.87
41,949.59	.....	.....	41,949.59	18,942.77	60,892.36	36,535.42
.....	.....	.....	.....	29,682.99	29,682.99	17,809.79
23,810.17	6,858.88	.....	30,669.05	8,519.74	39,188.79	23,513.27
106,622.18	6,960.56	.....	113,582.74	18,937.26	132,520.00	79,512.00
1,433,259.54	201,529.47	27,076.21	1,661,865.22	556,497.95	2,218,363.17	1,331,017.90

APPENDIX

EXPENDITURE ON MAINTENANCE

(Not Including Provincial

The following schedule shows in detail the work and Approved Expenditure on Maintenance

County	Grading	Culverts	Resurfacing	Dragging	Oiling or Tarring
	$ c.	$ c.	$ c.	$ c.	$ c.
Brant	1,106.86	130.48	17,223.94	2,394.66	603.68
Bruce	5,543.71	1,106.15	15,477.62	996.10	.....
Carleton	5,490.15	902.40	47,099.52	708.32	10,837.71
Dufferin	12,401.17	143.38	39,783.15	782.53	127.97
Elgin	6,056.17	1,026.67	43,764.18	4,970.31	54.70
Essex	.....	245.48	13,514.79	15,327.85	.....
Frontenac	.....	11.10	31,555.88	.....	128.06
Grey	2,962.93	3,497.44	47,424.37	21.50	.....
Haldimand	.....	16.20	6,519.44	1,083.60	.....
Halton	1,042.87	515.96	10,819.48	428.90	1,027.45
Hastings	5,811.30	1,170.64	56,697.63	.....	.....
Huron	7,468.83	2,726.32	42,145.57	1,252.51	347.47
Kent	2,208.58	431.09	15,963.73	11,533.71	.....
Lambton	3,474.50	111.37	25,627.45	5,916.12	.....
Lanark	5,895.51	85.00	25,425.33	.....	.....
Leeds and Grenville	25,517.19	3,509.62	81,771.98	1,153.00	.....
Lennox and Addington	1,049.00	297.80	21,006.02	.....	.....
Lincoln	637.43	115.65	15,793.40	4,421.67	3,073.95
Middlesex	9,511.07	2,787.65	72,302.07	6,739.61	.....
Norfolk	5,352.92	452.60	21,588.00	1,627.64	.....
Northumberland and Durham	11,405.49	1,954.31	32,238.22	2,213.44	.....
Ontario	6,902.85	364.15	29,696.19	1,505.02	.....
Oxford	450.48	1,765.83	21,226.95	379.10	1,140.00
Peel	1,298.38	189.64	26,169.70	1,607.54	1,265.52
Perth	2,871.42	249.37	22,618.88	.....	1,868.17
Peterboro	1,095.99	371.48	21,674.63	229.05	.....
Prescott and Russell	5,532.08	499.80	4,294.80	2,827.73	.....
Prince Edward	4,928.25	731.07	43,301.39	.....	.....
Renfrew	2,548.93	1,040.56	23,363.99	1,548.55	.....
Simcoe	11,716.19	418.31	73,348.55	830.40	329.05
Stormont, Dundas and Glengarry	6,938.07	1,999.55	31,496.64	2,757.75	1,040.92
Victoria	3,055.59	199.74	21,271.57	691.10	134.42
Waterloo	1,364.42	636.96	31,741.32	1,657.05	.....
Welland	7,439.00	88.50	63,786.77	825.65	637.90
Wellington	5,414.17	2,648.31	48,723.28	863.17	2,151.88
Wentworth	8,621.00	.....	50,131.30	.....	5,448.06
York	4,253.74	942.28	3,780.65	1,454.95	10,752.64
Totals	187,366.24	33,382.86	1,200,368.38	78,748.53	40,969.55

No. 3

ON COUNTY ROADS.

County Roads)

on County Roads during 1920 upon which Provincial Subsidies were paid in 1921.

Shovelling Snow	Bridges	Ditching and Draining	Cutting Weeds and Brush	Wire Fence Bonus	Total Expenditure	Total Government Grant, 40%
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,098.79	650.90	.....	288.10	.....	24,497.41	9,798.96
2,743.55	1,472.56	.....	.....	.....	27,339.69	10,935.88
1,123.99	2,905.34	.....	106.00	.....	69,173.43	27,669.37
1,479.40	61.91	276.05	156.70	.....	55,212.26	22,084.90
2,532.22	909.79	156.45	807.31	.....	60,277.80	24,111.12
93.05	500.38	75.44	.....	.....	29,756.99	11,902.80
509.43	144.75	.....	.....	.....	32,349.22	12,939.69
5,112.28	90.90	369.75	.....	916.40	60,395.57	24,158.23
677.65	7.00	.....	.....	.....	8,303.89	3,321.56
475.78	467.24	200.90	.....	.....	14,978.58	5,991.43
587.20	2,008.44	.....	.....	.....	66,275.21	26,510.08
3,630.90	7,502.32	.....	.....	.....	65,073.92	26,029.57
48.80	912.89	426.19	16.00	.....	31,540.99	12,616.40
			Opertg. Ferry			
473.87	48.30	118.86	495.50	.....	36,265.97	14,506.39
.....	336.29	.....	.....	.....	31,742.13	12,696.85
130.10	8.48	.....	.....	.....	112,090.37	44,836.07
700.95	622.41	51.00	.....	52.75	23,779.93	9,511.97
4,640.30	409.00	.....	854.28	.....	29,945.68	11,978.27
4,625.85	4,367.23	1,676.66	1,608.72	.....	103,618.86	41,447.54
		Guard Rail				
3,820.87	942.97	681.63	233.97	.....	34,700.60	13,880.24
2,316.67	700.00	.....	.....	.....	50,828.13	20,331.25
3,239.23	273.24	.....	544.42	207.53	42,732.63	17,093.05
1,229.00	936.76	.....	316.10	.....	27,444.22	10,977.69
433.89	628.60	.....	.....	.....	31,593.27	12,637.31
1,950.45	232.30	.....	.....	.....	29,790.59	11,916.24
418.80	2,163.88	.....	164.00	171.13	26,288.96	10,515.58
1,845.23	.....	.....	224.22	.....	15,223.86	6,089.54
1,386.70	892.67	.....	.....	.....	51,240.08	20,496.03
269.35	5,100.92	.....	831.83	.....	34,704.13	13,881.65
3,864.92	994.06	.....	.....	1,210.95	92,712.43	37,084.97
4,428.84	807.06	.....	942.60	.....	50,411.43	20,164.57
345.21	154.87	14.70	484.55	1,318.35	27,670.10	11,068.04
		Storm Fence				
395.39	3,102.16	167.30	.....	.....	39,064.60	15,625.84
1,168.84	152.50	.....	136.60	15.60	74,251.36	29,700.54
3,703.43	652.60	.....	.....	892.23	65,049.07	26,019.63
220.40	700.89	.....	.....	.....	65,121.65	26,048.66
2,717.02	1,090.11	.....	.....	.....	24,991.39	9,996.56
65,438.35	42,951.72	4,214.93	8,210.90	4,784.94	1,666,436.40	666,574.47

APPENDIX No. 4

EXPENDITURE ON MAINTENANCE ON PROVINCIAL COUNTY ROADS

The following schedule shows in detail the work and Approved Expenditure on Provincial County Roads during 1920, upon which Provincial Subsidies were paid during 1921.

County	Grading	Culverts	Resurfacing	Dragging	Oiling or Tarring	Snow Shovelling	Bridges	Ditching and Draining	Cutting Weeds and Brush	Wire Fence Bonus	Total Expenditure	Total Government Grant 60%
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Brant	2,794.35	54.14	27,936.59	1,363.68	1,628.07	487.95	147.86		178.17		34,590.81	20,754.49
Bruce	961.45	295.43	6,270.50	784.54		1,956.73	214.73				10,483.38	6,290.03
Carleton	1,423.28	177.95	12,294.17	50.00	421.12	220.75	403.48				14,990.75	8,994.45
Dufferin	39.25		1,001.90	13.20		274.19					1,328.54	797.12
Elgin	1,695.91	143.33	19,426.93	1,758.95	507.22	583.33	13.79				24,451.69	14,671.01
Essex	150.70	88.48	13,829.30	4,543.87	137.65	155.06		44.00	278.23		18,905.06	11,343.04
Frontenac	411.84	6.25	14,077.51			156.05	145.76				14,797.41	8,878.45
Grey	321.40	221.65	12,045.89	121.80		2,733.39	23.10				16,179.37	9,707.62
Haldimand		31.10	2,197.23	966.30		351.55	240.75	279.24		432.90	3,848.53	2,309.12
Halton		85.70	2,262.95	615.75		169.30	4.00	61.60			3,137.70	1,882.62
Hastings	14,376.64	887.52	59,170.46			31.30	411.95				74,877.87	44,926.72
Huron	689.83	292.10	11,042.85	409.45		1,055.00	677.51				14,166.74	8,500.04
Kent	996.28	43.50	1,318.77	1,646.80			2,606.27				7,137.11	4,282.27
Lambton	2,772.85	74.06	8,040.65	1,411.79		244.40	380.26	373.66	151.83		13,145.43	7,887.26
Lanark	2,545.39	250.00	5,452.15		1,863.73				221.42		10,111.27	6,066.76
Leeds and Grenville												
Lennox and Addington		316.91	31,427.73			1,194.00	514.34				33,452.98	20,071.79
Lincoln												
Middlesex	2,381.51	518.84	11,810.70	1,707.11		1,371.79	130.15	394.92	278.95		18,593.97	11,156.38
Norfolk	199.85	131.20	8,929.05	460.12		664.78	12.34	Guard Rail 4.35	49.10		10,450.79	6,270.47
Northumberland and Durham	1,300.00	1,100.00	18,400.00	786.31		941.16	350.00				22,877.47	13,726.48
Ontario	3,095.58	504.59	13,405.34	705.72	223.25	861.00	76.71		278.50		19,150.69	11,490.42
Oxford		401.92	11,667.99	56.25	35.27	311.56			97.40		12,570.39	7,542.23
Peel	8.50	12.25	551.75	164.40	32.00	284.25	238.88				1,292.03	775.22
Perth	2,233.27		8,419.65			1,285.18	74.66				12,012.76	7,207.65
Peterboro												
Prescott and Russell	1,178.56	230.15	2,420.76	1,126.81		689.15	89.72	42.00	97.20		5,735.15 14,190.00 2,048.54	3,441.10 8,514.00 1,229.12

Prince Edward .	605.42	351.90	11,530.43	.....	1,249.60	426.50	26.15	.....	.....	297.85	21,150.38	12,690.23
Renfrew	123.55	79.89	1,068.55	538.60	.....	88.75	10.00	.....	541.90	.....	30,526.75	18,316.05
Simcoe	2,624.85	289.50	15,949.68	84.00	202.40	1,564.56	137.54	123.55	178.55	454.20	8,881.06	5,328.64
Stormont, Dundas and Glengarry.	2,977.80	630.90	16,685.45	421.51	6,353.30	2,387.31	528.58	.....	135.20.	.....	5,330.57 18,942.77	3,198.34 11,365.66
Victoria	601.84	136.00	6,817.19	313.40	68.73	175.60	12.00	.....	.....	533.41	29,682.99	17,809.79
Waterloo	2,944.38	266.62	1,000.10	49.30	1,070.17	.....	.....	.....	.....	.....	8,519.74	5,111.84
Welland	1,639.30	30.75	14,797.79	407.10	1,687.08	245.55	.....	.....	.....	.....	18,937.26	11,362.36
Wellington	1,693.05	1,495.68	19,015.47	932.20	3,135.99	2,877.19	.....					
Wentworth	499.36	.....	6,898.78	.....	1,023.00	98.60	.....					
York	1,565.98	178.25	4,372.83	1,287.45	9,424.90	2,060.89	46.96					
Totals	54,851.97	9,326.56	401,537.09	22,726.41	29,063.48	25,946.82	7,517.49	1,323.32	2,486.45	1,718.36	556,497.95	333,898.77

APPENDIX No. 5.

EXPENDITURE ON TOWNSHIP ROADS.

The following schedule shows in detail the work and approved expenditure on Township Roads during 1920, and upon which Provincial subsidies were paid in 1921, under the provisions of the Ontario Highways Act.

Number of Townships	Approved Expenditure for the year.				
	Roads and Culverts	Bridges	Maintenance	Machinery	Purchase of Gravel Pits
184	$432,618.62	$270,596.52	$828,027.27	$91,704.24	$8,513.47

Total Approved Expenditure	Government Grant 40%	Government Grant 20%	Government Grant 20%	Total Expenditure
$1,631,460.12	$326,291.95	$36,767.60	$14,707.03	$340,998.98

Easy curves replaced sharp turns on the Provincial Highway between Dundas and Hamilton.

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The First Annual Report

OF THE

DEPARTMENT OF LABOUR

(FORMERLY THE TRADES AND LABOUR BRANCH)

INCLUDING THE REPORTS OF THE ADMINISTRATION OF

The Stationary and Hoisting Engineers' Act, The Factory Shop and Office Building Act, The Employment Agencies' Act, The Steam Boiler Act, and The Ontario Government Offices of the Employment Service of Canada.

Province of Ontario

1920

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1921

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To His Honour Lionel H. Clarke, Esq.,

Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

I have the pleasure to present herewith for your consideration the Annual Report of the Department of Labour for the year 1920.

Respectfully submitted,

W. R. Rollo,

Minister of Labour.

Toronto, 1920.

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INTRODUCTION

In 1916 the Legislature of Ontario passed an Act providing for the creation of a Branch of the service to be known as the Trades and Labour Branch. This Branch was to be charged with the administration of the Factory Act, the Bureau of Labour Act, the Steam Boiler Act, the Stationary and Hoisting Engineers' Act and the Building Trades, Protection Act. It was also to conduct investigations and researches into labour conditions and laws and to report upon and make suggestions for changes in any of the laws of Ontario affecting labour. The establishment and maintenance of public employment bureaus through the Province was also to be a duty of the Branch.

In the Fall of 1916 such a Branch was created and placed under the jurisdiction of the Department of Public Works, but with the rapid development of the Employment Service and the work of investigation and research, as well as the work of the other Branches under its jurisdiction, the advisability of creating a special Department to handle these affairs was soon seen. The result was that in 1919, the Legislature passed an Act providing for the creation of a new Department of the Government to be known as the Department of Labour. No steps were taken however, to establish the Trades and Labour Branch as the Department of Labour until the advent of the Farmer-Labour Government in November 1919, when the portfolio of Minister of Labour was filled and the Trades and Labour Branch became the Department of Labour with the Hon. W. R. Rollo as Minister and Dr. W. A. Riddell, former Superintendent of the Trades and Labour Branch, as Deputy Minister.

The first work ahead of the new Department was the completion of the investigation into the need for mothers' allowances and for the establishment of a Minimum Wage Board in Ontario. Both of these tasks were accomplished and resultant legislation providing for the creation of a Mothers' Allowances Commission and a Minimum Wage Board was passed at the 1920 Session of the Legislature. During the summer the Mothers' Allowances Comission was appointed and by the end of the fiscal year the Commission had got well under way with every prospect of establishing a record for itself for speed and efficiency in handling the vast number of cases which come within its scope. The terms of the Minimum Wage Act provided for its enforcement from November 1st, 1920, and the appointment of a Board to administer it was receiving first attention during the latter part of the fiscal year.

Great strides were made with the investigation into the vocational opportunities in the industries of Ontario and several bulletins on this subject have been published. It is confidently expected that it will only be a short time until the series is completed.

While the Department deeply regretted the resignation of its Deputy Minister early in May, it felt that an honour had been conferred upon it in the selection of one of its members to fill an important post in the International Labour Office of the League of Nations in Geneva, but that nevertheless in conferring this honour the International Labour Office had deprived the Department of a most valued and enthusiastic officer and one whom it could ill afford to lose.

Labour conditions throughout the Province were very good, wages were high in all trades and there was a constant demand for workers. During the summer there was a great shortage of farm labour and in the early fall, lumbermen and miners were experiencing difficulty in obtaining sufficient men to carry on their industries. By the end of October the shortage had somewhat lessened and already signs were evident of considerable unemployment during the coming winter.

LABOUR LEGISLATION. 1920.

The Statutes of Ontario, 1920 include various laws and amendments administered by the Department of Labour, as follows:—

I. The Workman's Compensation Act, 1920:

This amendment provides that the maximum amount payable under the Act for burial purposes be increased from $75 to $125; that the monthly payment to a widow or invalid husband may be $40 but not more than 66⅔ per cent of the average monthly earnings of the workman; that $10 instead of $7.50 a month be paid for each child under 16 years. Other amendments deal with limitations as to total amounts payable to parents; limitations upon total amount payable on death; limitation of amount of compensation in case of permanent, partial or temporary partial disability; furnishing artificial limbs, etc. free of charge.

II. The Stationary and Hoisting Engineers' Act, 1920:

This amendment provides for the appointment of a board of examiners of five members, the larger number being necessary to handle the increased volume of business.

III. The Minimum Wage Act:

This Act provides for a Minimum Wage Board with power to regulate in certain cases the minimum wages of women and girls. This Board is given the power to make investigations and to direct conferences between employers and employees relative to the minimum wages payable in various classes of employment. Penalties are provided for employers who may contravene an order. The Act does not apply to farm labourers or domestic servants.

IV. The Mothers' Allowances Act:

This Act provides for payment of allowances in certain cases to the mothers of dependent children. The Administration of the Act is given to a commission of five persons, with power to enquire as to persons eligible to receive allowances and to fix upon the amount to be paid in each case. Within certain limitations the municipality in which a beneficiary is resident is responsible to the Province for one-half of the amount paid in allowances and the interests of the municipality are safe-guarded by the co-operation of local boards working in conjunction with the provincial commission. To qualify within the Act a mother must be a widow, or the wife of an inmate of a Hospital for the Insane in Ontario, or of a man who is permanently and totally disabled. She must be a British subject and have two or more children under fourteen. Residence requirements include three years in Canada and two years in Ontario immediately preceding the date of application for an allowance.

REPORT OF GENERAL SUPERINTENDENT ONTARIO GOVERMENT EMPLOYMENT BUREAUS.

EMPLOYMENT SERVICE OF CANADA

INTRODUCTION

The Ontario Government Employment Bureaus, one of the units in the Employment Service of Canada may now be regarded as an integral part of the machinery created by the State in the interests of all classes of the community. The experimental aspect of public employment offices is now a matter of past record; the bureaus have been firmly established and are functioning with a gratifying degree of success. The organization has been built up in response to a definite need, and is filling that need within the limits of its ability, not only throughout Ontario but from coast to coast.

During the 12 months ending October 31st, 1920, 175,925 men and women applied to the Ontario Employment Offices for assistance in securing employment; employers asked for 172,767 persons during the same period, and confirmation of placement was received in the case of 110,485 men, and 8,250 women. These figures do not include casual placements, 17,117 of which were also made by the Bureaus during the year.

While the total number of placements made by the Bureaus during the year is surprisingly great, there remains much detailed and intensive work to be done before the Employment Service may be considered as complete, in any sense of the word. The foundations have been laid and the next step is the extension of the work in order to meet the demand for specialized employment service in certain fields. The effective placement of handicapped cases, the establishment of separate departments for dealing with juvenile workers, and the provision of departments equipped for the placing of professional and technical men and women represent problems which must sooner or later be faced by a public employment service, if it is to be a permanent and thoroughly efficient institution. take to build up a central organization and then to limit the scope of its usefulness by a policy of false economy.

In reviewing the achievements of the past year, an outstanding feature is the extent to which the purposes of the Employment Offices Co-ordination Act are being carried out. In the short space of two years, the majority of the objectives outlined by that Act have been attained. Provincial and inter-provincial employment clearance machinery has been built up and put into successful operation. Reliable and comprehensive statistics as to the employment situation have been compiled, and the Provincial and Federal participants in the employment office co-ordination plan have met from time to time and evolved a satisfactory working arrangement to cover every phase of the delicate adjustment between the various interests involved.

In short, the Employment Service of Canada is now a national institution with Federal and Provincial authorities sharing the cost of its upkeep, but with each province retaining complete control of its own unit in the service.

During the year seven of the Ontario Offices were closed, because it was realized that they had fulfilled the purpose for which they had been opened, viz: to assist in the re-establishment of the returning soldiers. The offices which were closed on this account were:

Brockville
Cornwall
Galt
Lindsay
Orillia
Owen Sound
Stratford.

Statistics showing the number of placements made by these offices will be found on page 12. In addition the Bureau at Arnprior was discontinued about December 31st, 1919, and business formerly handled by that office was directed to Pembroke and Ottawa.

Space does not permit a detailed report covering every phase of the work of each office, but a general survey of each district or "Zone" has been prepared and will be found on pages 23 to 41. In addition the report of a typical office, Port Arthur, has been given in full on pages 29 to 32, in order to indicate the natuse and extent of the work done by superintendents of local offices.

Taking the year as a whole, it can safely be stated that the demand for both men and women was slightly in excess of the supply. This conclusion would not be drawn at first sight, from the table shown on page 13, but in interpreting these statistics it is to be noted that the "applications" do not represent exactly the number of persons who have applied for work. Some of our "customers" return to us three or four times in a year, for assistance in securing work.

THE FEDERAL EMERGENCY APPROPRIATION.

During the month of December 1919, the Federal Government set aside a fund known as the "Federal Emergency Appropriation for ex-Service men, Unavoidably Unemployed." Commencing just before Christmas 1919, grants from this fund were disbursed to ex-soldiers and sailors, who were unemployed and in need of assistance. The payments were made in cash, the Employment Service, the Department of Soldiers' Civil Re-establishment, and the Patriotic Fund officials co-operating in the distribution of the money. Many attempts were made by unscrupulous persons to obtain money from this source under false pretences. The system of distribution was sufficiently rigid, however, to prevent imposition, except possibly during the first few days.

In the smaller cities and towns the Fund probably did the greatest amount of good per unit of expenditure. This was because of the more intimate relationship of the applicants and the investigators than is possible in larger centres. There is no doubt that a great deal of hardship was prevented and much distress among returned men and their families alleviated by the Appropriation. It enabled men to "tide over" a severe winter, and thus give them a better chance to re-establish themselves as citizens.

At the same time, the principle of giving money or doles as a palliative for a condition which should be solved at its source, is altogether iniquitous. It induces idleness, and encourages malingering, and has far-reaching tendencies towards the pauperization of the recipient.

GENERAL SUMMARY AND ANALYSIS OF REGISTRATIONS, VACANCIES AND PLACEMENTS

ONTARIO GOVERNMENT EMPLOYMENT BUREAUS

On page 12 will be found a table which summarizes the work done by the Ontario Offices of the Employment Service of Canada, showing that there were 160,173 registrations of men, and 15,752 registrations of women, in all offices during the year. Employers reported 145,519 vacancies for men, and 27,248 vacancies for women. The various Bureaus referred 134,768 men and 10,501 women to positions, and received definite notification of placement in the case of 110,485 men, and 8,250 women. The above figures refer to what is called Regular employment, in contrast with the Casual work, figures regarding which will be found on page 14.

The table on page 13 shows the work of the bureaus in the four-week periods which made up the year. The registrations of men in the period ending January 24, 1920, are almost double those in the average month. This is due to the fact that the Federal Emergency Appropriation for unemployed ex-service men was distributed at that time. The peak in the registrations in the women's department was reached in October 1920, when 1,772 women applied for assistance in securing positions. This indicated the approaching industrial depression, as there was a corresponding falling off in the orders placed by employers.

The largest number of orders for men in any one month, was in May, when 13,560 workers were called for; April and September were only slightly behind, however, in the number of calls for men. June saw the greatest number of requests for women workers, 3,079 being asked for throughout the Province. As previously stated the demand slackened off by October when only 1,586 requests for female help were received.

During the year 134,768 men and 10,501 women were referred to positions. The average number referred did not show any noticeable fluctuation during the year, running between eight and eleven thousand per month in the case of the men, and between seven and eight hundred in the case of the women, except in July and August when over a thousand workers were referred.

There is reproduced on page 13 a chart which indicates at a glance the employment situation throughout the year, as revealed by the records of the Employment Bureaus. The peak in the applications in January has already been explained. By the end of April the application curve was back to normal, and showed only minor fluctuations up to the end of the fiscal year. In the case of vacancies, the curve shows the usual Christmas time falling off, due largely to the annual stock-taking period and "closed for repairs" week of so many industries. From the stand-point of the workers, it would be highly advantageous if different industries distributed this period of "shut down" over other portions of the year.

TABLE 1.—Summary of the Activities of the Ontario Government Public Employment Bureaus in REGULAR work, November 1st, 1919, to October 31st, 1920.

Offices	Applications		Vacancies		Referred to Vacancies		Placements	
	Men	Women	Men	Women	Men	Women	Men	Women
Arnprior	149	.....	61	.....	150	.....	144	.....
Belleville	1,311	41	1,631	42	1,395	42	1,254	41
Brantford	1,437	147	1,446	154	1,557	163	1,353	140
Brockville	574	5	379	9	495	6	416	4
Chatham	41,67	.....	4,305	.....	4,273	.....	4,157	.....
Cobalt	1,930	18	2,623	25	2,011	18	1,923	17
Cornwall	570	4	442	.....	472	1	462	3
Fort William	5,374	40	8,143	69	5,073	22	4,325	14
Galt	344	.....	365	180	345	.....	344	.....
Guelph	2,571	172	2,517	700	2,529	175	1,766	149
Hamilton	7,291	1,689	6,762	2,398	7,335	1,261	6,585	799
Kingston	2,705	52	2,166	50	2,169	46	2,059	45
Kitchener	2,965	45	4,063	383	3,145	45	2,958	45
Lindsay	413	7	377	7	380	7	353	7
London	3,317	968	3,125	1,176	3,004	746	2,640	598
Niagara Falls	730	15	1,904	54	1,716	14	708	11
North Bay	3,595	5	3,957	5	3,813	5	3,445	5
Orillia	606	2	668	2	537	2	499	1
Oshawa	1,069	15	1,537	15	1,047	15	1,017	15
Ottawa—Dalhousie St	2,202	.....	664	.....	2,213	.....	1 995	.....
Ottawa—Queen St	8,826	953	5,434	1,386	7,722	601	6,418	400
Owen Sound	623	20	520	25	540	19	508	18
Pembroke	1,637	26	1,899	17	1,601	12	1,599	13
Peterborough	2,395	128	2,336	205	2,347	116	2,016	82
Port Arthur	7,285	36	9,351	60	7,936	32	6,519	30
St. Catherines	3,683	252	3,826	1,271	3,629	228	3,060	203
St. Thomas	1,528	28	1,710	40	1,462	25	1,408	22
Sarnia	1,184	17	1,249	25	1,195	14	1,166	15
Sault Ste. Marie	8,804	55	11 160	60	8,808	55	8,799	55
Stratford	571	22	732	53	523	1	434	1
Sudbury	9,303	42	13,565	50	13,544	41	9,299	40
Timmins	3,281	14	4,817	14	4,988	14	3,273	14
Toronto—Industrial	42,633	1,489	21,398	4,440	14,055	895	7,512	678
—Farm	4,748	790	4,296	1,136	3,437	622	3,250	517
—Clerical	.....	4,258	.....	2,890	.....	2,883	.....	2,148
—Domestic	.....	4,255	.....	10,148	.....	2,249	.....	1,997
—Professional	1,305	.....	758	.....	1,287	.....	578	.....
—Handicap	477	.....	361	.....	357	.....	339	.....
—Bloor St	1,542	.....	1,192	.....	1,168	.....	1,025	.....
—Unskilled	10,639	.....	7,201	.....	10,057	.....	8,892	.....
Welland	550	12	1,040	16	628	6	379	5
Windsor	5,839	130	5,539	143	5,825	120	5,608	118
	160,173	15,752	145,519	27,248	134,768	10,501	110,485	8,250
Totals	175,925		172,767		145,269		118,735	

TABLE 2.—Summary of the Activities of the Ontario Government Public Employment Bureaus in REGULAR work by four-week periods, from November 1st, 1919, to October 31st, 1920

1919–20	Applications for work		Vacancies Notified		Referred to Positions		Placements	
	Men	Women	Men	Women	Men	Women	Men	Women
Four weeks ending;—								
November 29	10,708	1,092	12,331	1,887	9,500	740	8,306	559
December 27	11,179	812	8,548	2,219	7,802	541	6,360	425
January 24	19,426	1,045	8,337	1,582	8,864	706	7,047	535
February 21	14,966	872	9,597	1,906	9,764	722	7,591	517
March 20	13,773	947	9,926	2,550	9,631	745	7,604	537
April 17	12,637	1,003	13,139	2,394	11,438	766	9,458	553
May 15	11,569	1,194	13,560	2,796	11,477	861	9,422	688
June 12	10,520	1,202	10,961	3,079	10,216	875	8,726	695
July 10	10,889	1,581	11,270	1,978	10,359	1,046	9,016	872
August 7	11,473	1,465	11,785	1,786	11,739	1,003	9,511	815
September 4	11,292	1,330	12,124	1,745	11,413	826	9,401	653
October 2	11,175	1,437	13,062	1,740	11,516	782	9,232	647
October 31	10,566	1,772	10,879	1,586	11,049	888	8,811	754
	160,173	15,752	145,519	27,248	134,768	10,501	110,485	8,250
Totals	175,925		172,767		145,269		118,735	

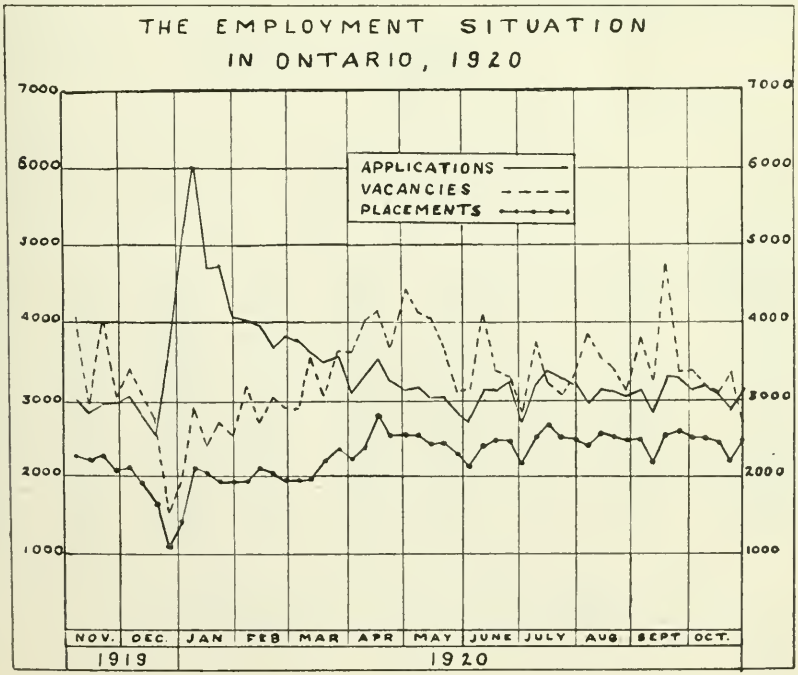


TABLE 3.—Summary of the Activities of the Ontario Government Public Employment Bureaus in CASUAL work November 1st, 1919—October 31st, 1920.

1919—20	Applications for work		Vacancies Notified		Placements	
	Men	Women	Men	Women	Men	Women
Brantford	349	396	346	410	349	396
Fort William	36	.....	46	.....	34	.....
Hamilton	.....	2,220	.....	2,679	.....	2,200
London	15	87	16	329	15	279
Orillia	9	1	9	1	9	1
Oshawa	29	.....	29	.....	29	.....
Ottawa—Queen Street	.....	600	.....	546	.....	648
Port Arthur	96	5	95	5	95	5
Sudbury	22	1	22	1	22	1
Toronto—Domestic	.....	9,368	.....	14,522	.....	12,869
—Industrial	155	17	490	19	154	11
	711	12,695	1,053	18,512	707	16,410
Totals	13,406		19,565		17,117	

TABLE 4.—Summary of the Activities of the Ontario Government Public Employment Bureaus in CASUAL work by Four week periods from November 1st, 1919, to October 31st, 1920

1919—20	Applications for work		Vacancies Notified		Placements	
	Men	Women	Men	Women	Men	Women
Four week periods;—						
November 29	91	921	132	1,432	95	1,391
December 27	32	719	53	1,076	31	1,057
January 24	40	677	63	928	34	877
Feburary 21	44	831	79	1,200	44	1,211
March 20	26	982	46	1,457	26	1,276
April 17	26	961	59	1,644	26	1,346
May 15	44	1,084	102	1,915	43	1,579
June 12	55	882	105	1,646	55	1,253
July 10	175	1,229	204	1,522	175	1,401
August 7	54	961	70	882	54	857
September 4	38	1,025	40	1,424	38	1,280
October 2	40	1,064	49	1,689	40	1,376
October 31	46	1,359	51	1,697	46	1,506
	711	12,695	1,053	18,512	70	16,410
Totals	13,406		19,565		17,117	

The vacancies curve shows an upward trend early in January, until a peak was reached in May. Normal fluctuations followed until the placing of orders for bush work, which brought the curve to the highest point which it reached during the year. The falling off in orders was reflected in the last few weeks of the fiscal year, the curve showing a marked downward tendency.

In analyzing the placement curve, it is interesting to note the "steadiness" of the curve throughout the entire year, with the single exception of the last two weeks in December, and the first week in January 1920. That the placements made by the Ontario Government Bureaus average over two thousand per week, in normal times, is an indication of the extent to which the Bureaus are utilized both by employers and employees.

On page 14 will be found two tables showing the work of the Bureaus in casual placement work, divided in one case, in accordance with the work done by each office, and in the other according to four weeks periods covering all offices. These tables are self-explanatory, and are reproduced without comment, except that it may be noted that casual placement work is a relatively unimportant percentage of the bureaus' activities.

The table on page 20 which summarizes the activities of the Bureaus in regular placement work, according to industrial groups, is of much more significance. It will be seen from this table and from the four charts which follow it, that the bureaus play an important part in bringing together employers and employees in practically every trade and occupation in the Province.

In the general labouring occupations, the largest number of applications received in any one month was in December 1919. This was partially due to the difficulty of classifying in any definite trade or occupation the large number of boys who enlisted in the Canadian Expeditionary Force at an age when they would ordinarily have been learning a trade, or finishing their education, and who returned to Canada as men, in years and experience, but lacking a definite occupation. It would have been nothing less than an industrial calamity if the Federal Government had not provided training courses for these men to enable them to fit themselves for civil life.

In the month of May, 1920 there were 4,006 placements made in this group, and the total throughout the year amounted to 41,975.

Lumbering came next in importance, from the point of view of actual registrations and placements. The highest point was reached in November 1919, when 2,666 placements were made. The total number of orders placed during the year called for 28,762 men, 23,686 of whom were secured by the bureaus. This high percentage of placements as compared with vacancies refutes the statement which is sometimes made that public employment agencies cannot efficiently handle lumber placement work.

In the agricultural industries, which ranked third in importance, 8,886 men, and 810 women were asked for during the year. The Bureaus succeeded in filling the requirements of the farmers in the case of 7,448 men, and 507 women. As was to be expected, the highest number of applications and placements were in July and August. The chart on page 19 indicates the extent to which the agricultural industry is seasonal, from the point of view of the demands upon the employment office.

In the building trades the largest registration was in February, 1919, when 1,956 workers applied for positions. The smallest number in any one month, 683, was noted in May, when the great amount of building which was in progress made

it possible for building tradesmen to secure work without the assistance of the Bureaus. There were, throughout the entire year, 12,032 applications, 9,972 vacancies and 7,214 placements.

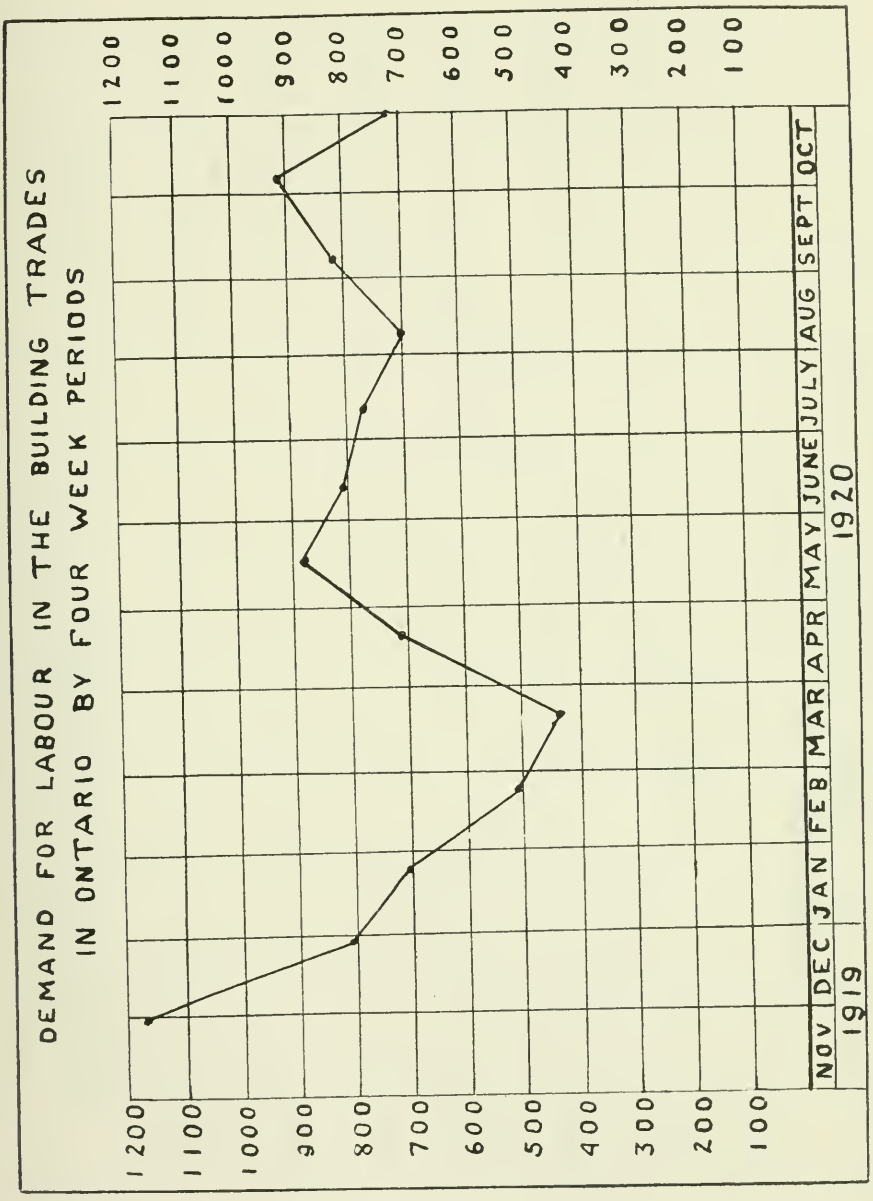
In domestic and personal service, which includes hotel work 6,669 men and 7,065 women were registered; employers called for 4,390 men and 14,794 women. It was possible to fill 3,100 of the vancancies for men, but only 25.1% of the female help required could be secured, the placements numbering 3,714.

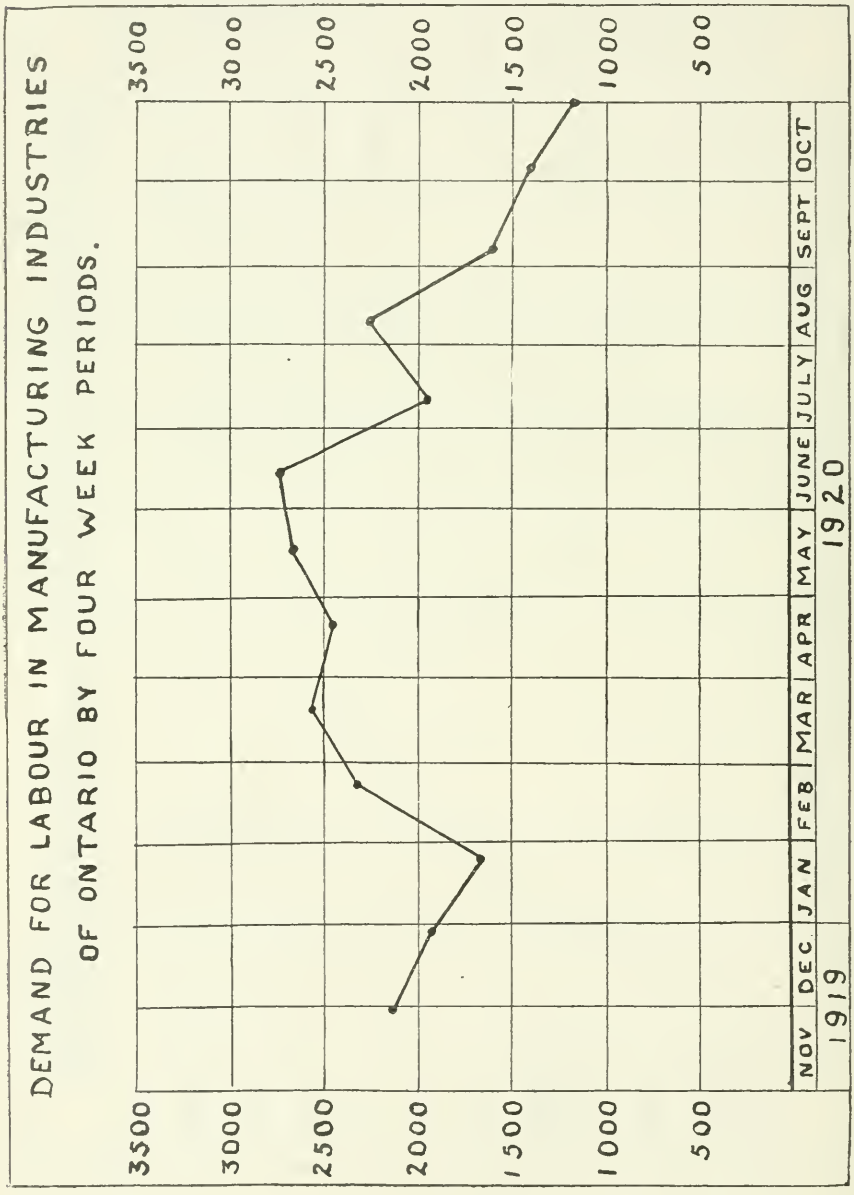
The manufacture of metals required the services of 9,076 men and 1,226 women; 5,599 men and 426 women were placed. The peak of the applications was reached in January, and of orders in April. The highest number of placements in any one month was in March when 584 workers were placed in this industrial group. The approaching depression was not noticeable in the orders placed up to October 31. 1920.

In the various occupations listed as commercial and clerical. there were 9,371 men registered, and 5,252 women. Of the men 2,362 were placed, while positions were also found for 2,488 women. In this group the depression was foreshadowed in the shrinkage in employers' orders for men, there being a noticeable falling off as the end of the fiscal year approached.

The trend of orders and applications in the mining industries. the chemical industries and other industrial groups is shown on the table on page 20. In interpreting this table the chart on page 24 should receive attention, as it indicates at a glance the various industrial groups which were served by the employent bureaus.

On pages 17 and 18 will be found self-explanatory charts showing the demand for labour in the building trades and the manufacturing industries through the year.


DEMAND FOR LABOUR IN THE BUILDING TRADES
IN ONTARIO BY FOUR WEEK PERIODS
1200
1100
1000
900
800
700
600
500
400
300
200
100
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEPT
OCT
1919
1920


DEMAND FOR LABOUR IN MANUFACTURING INDUSTRIES
OF ONTARIO BY FOUR WEEK PERIODS.
3500
3000
2500
2000
1500
1000
500
NOV
DEC.
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEPT
OCT
1919
1920

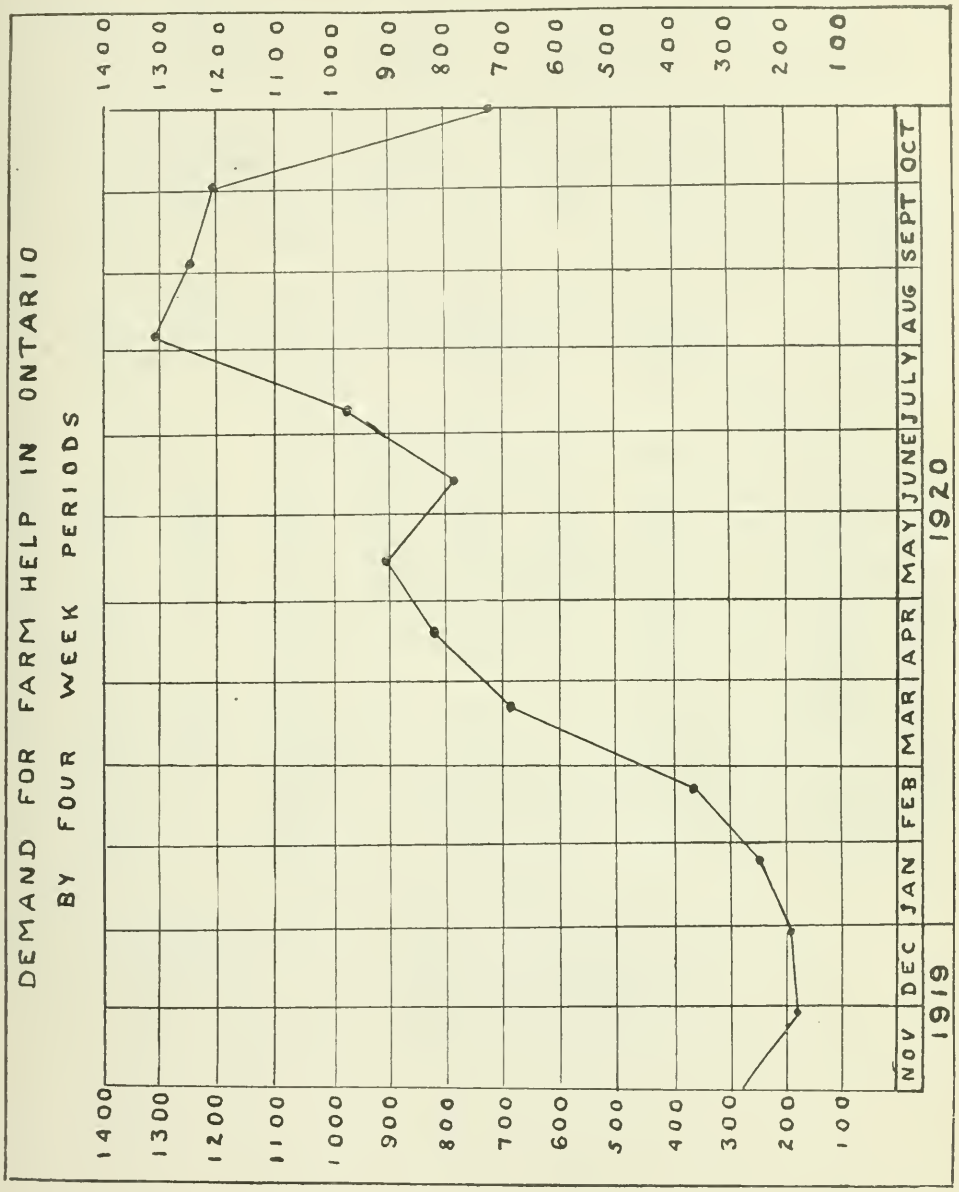

DEMAND FOR FARM HELP IN ONTARIO
BY FOUR WEEK PERIODS
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEPT
OCT
1919
1920

TABLE 5.—Summary of the Activities of the Ontario Government Public Employment Bureaus in REGULAR work November 1st, 1919, to October 31st, 1920.

Kind of work	Applications for work		Vacancies Notified		Referred to Positions		Placements	
	Men	Women	Men	Women	Men	Women	Men	Women
Agriculture	9,385	678	8,886	810	7,913	543	7,448	507
Building and Construction	12,032	.....	9,972	.....	8,769	.....	7,214	.....
Commercial and Clerical	9,371	5,252	3,552	3,420	3 842	3,368	2,362	2,488
Domestic and personal	6,669	7,065	4,390	14,794	4,159	4,626	3,100	3,714
General Labor	56,309	.....	52,651	.....	51,421	.....	41,975	.....
Lumbering	24,893	.....	28,762	.....	28,414	.....	23,686	.....
Mfg. Clay Products Etc	177	6	168	27	41	6	36	6
Mfg. Chemicals, Rubber Etc	1,882	154	1,933	779	1,748	199	1,632	169
Mfg. Food, Drink, Tobacco	1,527	276	1,301	831	1,035	292	969	222
Mfg. Leather Goods	663	28	384	725	246	23	190	15
Mfg. Metals	11,151	536	9,076	1,226	6,930	558	5,599	426
Mfg. Paper and Printing	1,141	101	1,909	745	1,627	108	722	69
Mfg. Textiles	895	789	1,056	3,537	345	559	251	437
Mfg. Vehicles	1,705	.....	1,751	.....	1,511	.....	1,412	.....
Mfg. Wood, Furniture Etc	1,199	8	1,479	63	768	10	647	9
Professional and Technical	1,545	189	709	73	733	74	488	64
Quarrying and Mining	3,103	.....	3,913	.....	3,397	.....	2,941	.....
Rly. Construction	2,716	.....	3,302	.....	2,802	.....	2,423	.....
Rly. Operation	2,275	.....	2,418	.....	1,919	.....	1,600	.....
Shipping and Longshore	1,965	.....	2,171	.....	1,740	.....	1,507	.....
Miscellaneous	9,570	670	5,736	218	5,408	135	4,283	124
	160,173	15,752	145,519	27,248	134,768	10,501	110,485	8,250
Totals	175,925		172,767		145,269		118,735	

TABLE VI—Percentage Analysis of Applications, Vacancies and Placements for year ending October 31st, 1920.

Kind of Work	Registrations per 100 Vacancie		Percentage of Applicants Placed		Percentage of Vacancies Filled		erc ntage of Total No. of Men Placed	Percentage of Total No. Women Placed	Percentage of Total Placements
	Men	Women	Men	Women	Men	Women			
Agriculture	105.6	84.1	79.4	74.8	82.7	62.6	6.7	6.1	6.7
Building and Construction	120.6	.....	60.0	.....	72.3	.....	6.5	.....	6.1
Commercial and Clerical	263.8	153.6	25.2	47.4	66.5	72.7	2.1	30.2	4.1
Domestic and Personal	151.9	47.7	46.5	52.6	70.6	25.1	2.8	45.0	5.7
General Labour	106.9	.....	74.5	.....	79.7	.....	38.0	.....	35.4
Lumbering	86.5	.....	95.2	.....	82.3	.....	21.4	.....	19·9
Manufacturing	106.7	23.9	56.3	71.3	60.1	17.1	10.4	16.4	10.8
Professional and Technical	217.9	258.7	31.6	31.7	63.2	87.7	.4	.8	.5
Quarrying and Mining	79.3	.....	94.8	.....	75.2	.....	2.7	.....	2.6
Railway Construction	82.6	.....	89.2	.....	73.4	.....	2.2	.....	2.0
Railway Operating	94.1	.....	70.3	.....	66.2	.....	1.5	.....	1.3
Shipping and Longshore	90.5	.....	76.7	.....	69.4	.....	1.4	.....	1.2
Miscellaneous	166.8	307.3	44.8	18.5	74.7	56.9	3.9	1.5	3.7
Industries	110.1	57.8	69.0	52.4	75.9	30.3	100.0	100.0	100.0
	101.1		67.5		68.7				

An analysis of table VI shows the relative activity of the Employment Bureaus in the various industrial groups and the degree to which the needs of employers and workers were met during the year. Exclusive of casual workers (i.e. those placed in employment of less than two weeks duration) 67.5 per cent of those registering were reported as placed in positions filling 68.7 per-cent of the vacancies notified by employers.

The largest number of placements in any industrial group were made in General Labour, 35.4 percent of the total placements being in this class of work, which is almost exactly the same proportion as during the previous year. Lumbering comes second with almost 20 percent of the total placements which is a relatively higher ratio than during 1919 when the percentage was 13.3. The various manufacturing groups accounted for 10.8 per cent. of the placements as compared with 14.4 percent during 1919. This decrease was due to the rapidly declining demand for factory help during the latter part of the year.

Taking the year as a whole the demand for miners was relatively greater than for any other class of male worker, only 79 applicants being registered for each hundred vacancies. The existence of this scarcity of labour was borne out by the fact that many mining companies made requests to have miners admitted from other countries.

The other extreme was in evidence in professional occupations, in which the number of applicants was more than twice the number of vacancies. This condition also prevailed in the Commercial and Clerical group. In spite of this excess of supply only 66.5 per cent of the vacancies in the latter group were filled, largely because so many of the openings were for salesmen to work on a strictly commission basis.

Of the women who were placed in positions through the Employment Service, 45 per cent went to household work. That the demand for such help could not be adequately met is shown by the fact that, on the average, there were less than 48 applicants for each 100 vacancies. The Commercial and Clerical group absorbed 30.2 per cent of the women placed. while the Manufacturing Industries received 16.4 per cent.

The demand for women for factory work is indicated by the fact that only 23.9 applicants were registered for each 100 vacancies. Moreover only 17.1 per cent of such positions were reported as filled. Relief from this scarcity was sought particularly by manufacturers of Textiles and Rubber Goods by making application to have skilled workers admitted from other countries. Towards the end of the year, however, general industrial conditions caused a decided falling off in this demand.

SUMMARY OF ACTIVITIES OF BUREAUS

ARNPRIOR

As noted in the introduction of this report the Arnprior office was closed about December 31st, 1919. There were 144 men placed in positions during the months of November and December, 1919.

BELLEVILLE

There were 1,254 men and 41 women placed in employment through the Belleville office during the twelve months ending October 31st, 1920. The outstanding features of the work of this office were the placement of men who were rated as 100 per cent disability cases as a result of their war service, and the establishment of a rooming-house directory for the information of out-of-town applicants for employment.

BRANTFORD

During the year 1,437 men and 147 women applied for work at the Brantford office. Of this number 1,353 men and 140 women were placed, representing 853 per cent. of the total number of applicants. The office is serving an increasing number of employers and employees, the increase in the farm business being particularly conspicuous.. As elsewhere in the Province the demand for female help has exceeded the supply during the year.

BROCKVILLE

The Brockville office was closed May 31st, 1920, after placing 420 persons in positions during the seven months of the fiscal year of which it was opened.

CHATHAM

The noticeable feature of the work of the Chatham office has been the splendid co-operation between the employers in practically every occupation. Local industries and the firms in the surrounding district have made constant use of the bureau with a result that 4,157 placements were effected during the year. When it was not possible to fill local vacancies with local men the employment clearance system was used to advantage. The high wages paid in the tobacco fields during the summer, together with the opportunities offered by auto factories and the sugar beet industry attracted many men to Chatham. As local opportunities for employment became fewer with the approach of Autumn, the employment clearance system was again used to advantage and large numbers of men were sent to farm work in Western Canada and the lumber woods of Northern Ontario.

COBALT

The increase in the work done by the Cobalt office in 1920 as compared with 1919 is shown by the fact that 86 different employers were served during the former year and 188 during the year ending October 31st, 1920. The wide range of employment in the Cobalt district covers such occupations as mining, fire ranging, road construction, mill construction and lumbering. The clearance system was used as far as possible in supplying the demand of these various occupations. In his annual report of the office the Superintendent states: "working harmoniously in conjunction with the lumber employers, the Ontario Government Employment Bureau in Cobalt has attained during the past year an increased recognition of its services, additional confiidence, and more effective co-operation."

CORNWALL

The Cornwall office which was closed on May 31st, 1920, placed 465 persons in employment during the preceding seven months.

FORT WILLIAM

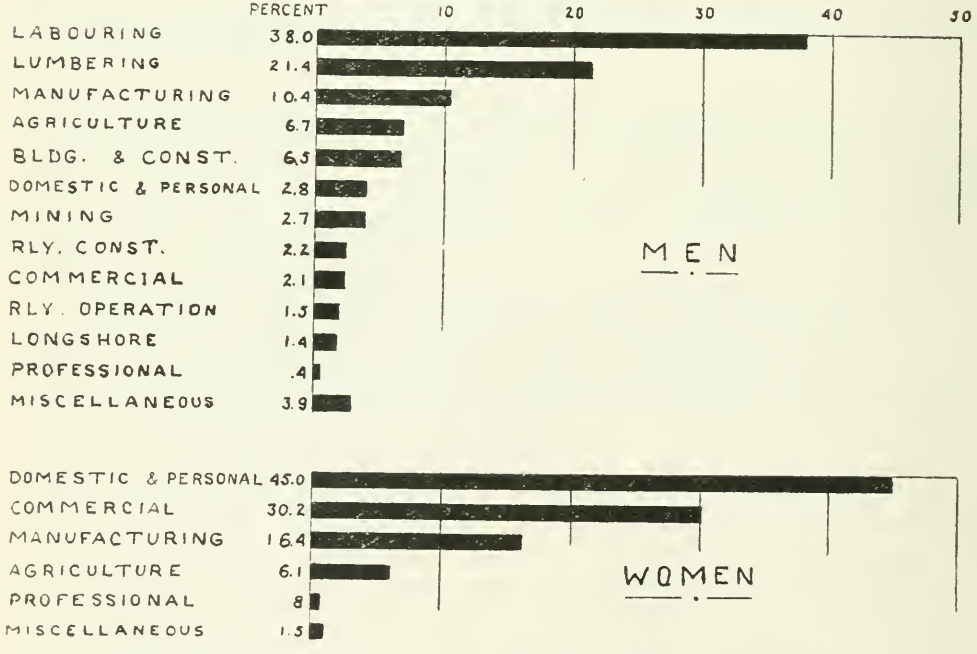
Fort William is one of the offices where its out of town business exceeds the local placement work in volume and importance. As a result special attention has been paid in this office to this phase of employment work and the service rendered to employers proves conclusively that the public service can give more satisfaction than the private agency is able to do. During the year 4,339 placements were made, the greatest volume of business being transacted in October, when 607 men applied for work and 599 were referred to positions.

GALT

Three hundred and forty-four placements were made by the Galt office between November 1st, 1919 and May 31st, 1920, on which date this office was closed.

GUELPH

The superintendent of the Guelph office maintains the closest contact with local manufacturers as is also the custom of other superintendents. The result of this personal canvassing is shown by the fact that 1,766 men and 149 women were placed. In addition to local placements the clearance system was used to advantage in shipping bushmen to Northern Ontario.



ANALYSIS OF PLACEMENTS BY INDUSTRIAL GROUPS, 1920

HAMILTON—MEN'S DEPARTMENT

During the year orders for 6,762 men were placed with the Hamilton superintendent, 7,335 men were referred to positions and 6,585 placements were made.

In the agricultural occupations the wages paid during the year ranged from $40. to $60. per month and board, for single men, while married men received from $50. to $70. per month with free house, free milk and in some cases a free supply of firewood. The office placed 3 men in positions as farm managers at wages ranging from $90. to $125. per month and free house. During the year 490 men were placed on farms, 76 of whom were supplied as fruit pickers.

Road construction work during the Summer was plentiful on the various trunk roads leading to the city. Building operations also supplied a great deal of employment. The industrial disputes which occured during the year first involving the carpenters, then the bricklayers, hoisting engineers and general labourers, had a tendency to restrict building operations for a time, but the disputes were all amicably settled in a short time. The total value of building permits granted for the first ten months of 1920 was $3,985,895. There were 565 men supplied by the office to assist in the construction of these buildings.

Two hundred and forty placements were made in commercial and clerical positions and there were 2,959 men placed in positions as general labourers at wages ranging from 41c. to 60c. per hour, while the office furnished 360 men for various lumber camps at wages ranging from $60. to $75. per month with board. In the manufacturing industries the demand was slightly in excess of the supply and the office had no difficulty in placing competent applicants, positions being found for 577 men during the 7 months.

HAMILTON—WOMEN'S DEPARTMENT

During the greater part of the past year there was a scarcity of industrial workers. It was impossible to secure an adequate number of women to meet the incessant demands of the employers for either experienced or inexperienced workers. In May a change came. This was first noticeable in the boot and shoe and clothing trades, followed by a slackening in the textile industry.

Until the change occured the Manufacturers of Textiles were willing to take almost any kind of women or girls, young girls to learn and elderly women as menders, but even under these conditions they could not secure enough workers, so that we found no difficulty in placing any persons desirous of work. Now we can secure openings for the experienced seamers, toppers and menders, but experienced only.

In June the Canadian Westinghouse Company opened a new plant in West Hamilton to manufacture Tungsten lamps, as well as a new department in their factory for small motors, in all giving employment to some 400 to 500 women. Among other new Industries handled during the year were the Canadian Car Fasteners Company, The Canadian Porcelain Company and Campbell & Sons Pottery, which opened the plant to women for the first time in February.

At no time during the year has the supply of applicants for household work equalled the demand. Not even under existing conditions where the factory worker has found it advisable to turn to domestic work, can we secure an adequate number of capable cooks and cook-generals. While Hamilton did not secure any domestics under the auspices of the Canadian Council of Immigration of Women for Household Service, a great number have registered with us who have paid their own passage and have come out to relatives and friends. These English and Scotch women know the value of the Employment Service and use us in preference to answering advertisements.

Probably the greatest advance shown in the work of the Bureau for the year, in comparison to past years, is in the Casual work, 2200 women having been given Casual employment during the year.

There were during the year 1,689 applications for employment, while employers asked for 2,398 workers. Seven hundred and ninety-nine placements were made in regular employment and 2,200 in Casual work.

KINGSTON

When the local demand for men diminished in December 1919, the situation was relieved by the employment clearance system, which, in the opinion of the local superintendent proved "of inestimable value in regulating the transfer of men to out of town work."

In Kingston as elsewhere the work done by the employment superintendent cannot be shown by mere recital of statistics. The local representative of the Employment Service serves as a veritable bureau of information on matters pertaining to employment not only in his own vicinity but elsewhere in the Province and the Dominion. In the case of Kingston the superintendent has had many years of experience in various phases of municipal work, which enables him to render better service both to employers and employees.

The fact that 2,059 men and 45 women secured work through the Kingston office during the twelve months ending October 1920, was an indication of the extent to which the office has become a necessary part of the city's industrial life. Employers asked for 2,216 workers during the twelve months which goes to show that the supply and demand for workers were approximately equal in 1919—1920.

KITCHENER

The healthy industrial situation in Kitchener and the surrounding district during 1919—1920, is shown by the fact that employers placed orders with the employment bureau for 4,063 men and 383 women, during the twelve months ending October 31st. There were 2,953 men and 45 women placed in positions during the same time, the supply being approximately thirty per cent. below the demand. In addition several factories and the construction of a large number of residences kept a number of construction workers busy during the season. The local demand for men is indicated by the fact that it was not until the last week in September that any men were available in Kitchener for bush work; 80 men, however, registered for this occupation during the last week of September and the month of October. The greatest volume of placement work was in connection with the various forms of factory occupations, 1554 workers being placed with this industrial group. Next in importance from the standpoint of the number of workers placed is construction work, 766 placements being made by the bureau.

LINDSAY

Previous to the date of its closing in May 1920, the office in Lindsay placed 350 men and 7 women in positions, while during the same period employers asked for 384 workers. This relatively small volume of business did not justify the continuance of the office.

LONDON—MEN'S DEPARTMENT

During the first six months of the fiscal year there were 1,307 applications for employment and 814 placements. During the second six months the applications raised to 2,010 and the placements to 1,834. This marked increase in the business of the office is due to the transfer to London of Mr. J. C. Spencer, who previously had been superintendent of the Ottawa office. Placing special emphasis on the farm work of the London bureau, Mr. Spencer increased the number

placed by this section of the office from 59 during the first six months to 401 during the second six months. A fuller measure of co-operation on the part of local employers also resulted from the change and the bureau throughout the entire year succeeded in placing in positions 2,648 out of 3,317 applicants.

As one of the "Zone" clearance headquarters London serves as a clearing house for labour in the South Western section of the Province, the offices being in constant communication with each other through the central office in London, so that when it is impossible to supply workers locally, they are obtained with the minimum of delay from other offices in the Zone.

LONDON WOMEN'S DEPARTMENT

Throughout the year the Women's Department of our London office found employment conditions to be steady, with the exception of the shoe factories, in which there was a noticeable falling off in the months of July and August. The opening of a new hosiery mill has extended opportunities for workers in London. The employment of women in pressing hides and glossing leather also represents a new occupation for women. The employment situation for women in London throughout the year is indicated by the summary which will be found on page 43. Of the 968 women who applied for work, 598 were definitely known to have been placed in positions, in addition to which 279 Casual placements were made.

NIAGARA FALLS

Seven hundred and five men and eleven women secured positions through the Niagara Falls office during the year. The largest volume of business in any one month was in July when 86 placements were made. On account of its proximity to the Hydro Electric Power development work on the new Welland Canal, the majority of placements were made in positions with these two undertakings. Positions were found in addition, for a large number of factory workers, as the local superintendent has, by careful selection of help and by frequent personal canvassing the country, the confidence of the local employers to a very large extent.

Through the medium of provincial clearance this office was instrumental in obtaining 1031 workers from other parts of the Province, largely for Hydro Electric development work.

NORTH BAY

As North Bay is the gateway to an immense mining and lumbering district, positions have been available for a very large number of workers, both skilled and unskilled; 3,957 men were called for by employers during the year. This unskilled. 3,957 men were called for by employers during the year and 3,813 were referred to positions, the demand being only slightly less than the supply. Although there was a tendency for the offers of employment to diminish in October 1920 throughout the remainder of the Province, in North Bay there were more requests for men in this month than at any other time during the year. This was due largely to the demand for men for lumbering operations and so also influenced the demand for men in the mining industry.

ORILLIA

Although this office placed 498 persons in employment during the nine months ending July 31st, 1920, it was not considered that there was a sufficient volume of business to justify the continuance of this office and it was accordingly closed early in August of that year. As the town is relatively small those seeking employment visited all the factories in a very short time. Another feature which entered into the decision to close the office was the fact that no industries requiring large numbers of workers are situated in the vicinity of Orillia.

OSHAWA

In order to secure the maximum number of farm placements the Superintendent of the Oshawa office circularized the rural sections of his district early in the summer of 1920. One hundred and fifty two vacancies resulted from this experiment, with wages running from $35.00 to $60.00 per month and board, according to experience.

In the building and construction industries the demand for men exceeded the supply. This was occasioned by the fact that Oshawa ranked fifth in the Province in the value of building permits issued during the year. More than 150 houses were constructed, and the wages paid carpenters and bricklayers approached the Windsor rate.

In the manufacturing industries, the demand for men also exceeded the supply, largely on account of the difficulty of securing accommodation. The main industries served by the bureau were the automobile plants, the moulding shops, the sheet metal factory, the woollen mills and the tannery.

Employers asked for 1552 men during the year, 1030 of whom were supplied by the bureau.

OTTAWA—QUEEN ST.
MEN'S DEPARTMENT

Although Ottawa is not an industrial city, its geographical location makes it a centre for collecting and distributing men for the lumber camps. It also serves as a distributing point for farm labour, five hundred and thirty four farm workers having been sent out by the Ottawa office during the twelve months ending October 31st, 1920.

A measure of co-operation between the Employment Office and the Civil Service Commission has resulted in occasional placements in Federal Government positions.

Through close co-operation with both the employers' associations and the labour unions, the Bureau has been instrumental in making a large number of placements in various kinds of construction work. Section hands and construction laborers were placed by the Bureau on the various Railways centering in Ottawa.

There were 8826 applications for work at the Queen Street Bureau during the year, 7722 men were referred to positions and verification of placement was received in 6418 instances.

OTTAWA—QUEEN ST.
WOMEN'S DEPARTMENT

In order to obtain the most effective results, the Women's Department of the Ottawa Office has co-operated closely with such organizations as the Big Sisters' Association, the Welfare Bureau of the Y.W.C.A., the University Club, and other smiilar bodies.

The demand for stenographers has been extremely limited. The "demobilization" of war-time departments of the Federal Government has thrown hundreds of girls out of employment, and the business men report that their offices have been besieged with young women seeking stenographic and clerical work.

Nine hundred and fifty three applications for work were received by the Women's Department, 601 workers were referred to positions and 400 placements were made. In addition, 648 Casual placements were made during the year.

OTTAWA—DALHOUSIE STREET OFFICE

In order to have an employment office in the section of the city where lumber workers are in the habit of congregating, a branch office was opened on Dalhousie Street in October, 1919, and continued in operation until the end of the fiscal year, except during the month of July.

During the year there were 2202 applications for employment made at this office and 1998 positions were filled; over 80% of the placements were in the lumber industry.

OWEN SOUND

As stated in the introduction to this report, the Owen Sound Office was among those which were closed in May 1920.

Between October 31st, 1919 and May 31st, 1920, positions were secured through the office for 508 men and 18 women.

PEMBROKE

As it is in touch with practically every lumber firm operating in the Pembroke district, the Pembroke Office has been extremely successful in the placement of bushmen. The demand for this type of workers, however, has exceeded the supply. In local industries the labor turnover has always been relatively small, with the result that the local employment office has made more placements outside than within the town. There has been less farm business handled than would ordinarily be expected, the reason probably being the fact that Pembroke is a border city, with consequent limitation of territory.

There were 1612 placements made in the twelve months, while employers asked for 1916 workers during the same period.

PETERBOROUGH

In Peterborough, as elsewhere in the Province, an effective local organization reduced to the minimum the amount expended under the Federal Government's plan for the assistance of unemployed ex-service men. Local manufacturers realized the desirability of securing work for men who were participating in this relief, with the result that every effort was made to provide employment for the veterans. With the opening up of work in the spring of 1920, there was a shortage of workers for a time, particularly in the case of skilled mechanics, farm help, and female factory workers.

Two thousand and ninety-eight placements, eighty-two of whom were women, were made by the Bureau during the year. Employers' orders for help totalled 2,541, which indicates that the supply and demand were approximately equal throughout the year.

PORT ARTHUR

(As previously stated, the report of the Superintendent at Port Arthur,—Mr. Frederick Urry,—has been reproduced in full, as a typical example of the extent to which the local employment office touches practically every phase of a community's industrial activity.)

The work of the Ontario Government Free Employment Bureau in Port Arthur has increased for the year ending October 31st, 1920, in all directions over the record of the year ending October 31st, 1919. This is the second full yearly report, as during the year 1918 this office was only in operation from March 1st, of that year and the first report on the 31st of October was, therefore, for eight months only.

During the year just closed the office records show more registrations from employers in the city and district; more registrations of men seeking employment; and far more placements through the Provincial and Dominion Clearance Offices. During the whole of the year the orders received from employers have been in excess of the applicants for work, which, from the working man's standpoint, is satisfactory and shows the general activity of construction work, transportation and navigation business and the generally prosperous state of business and commercial enterprises in this district.

It is interesting in looking over the records, to notice the great variety of occupations in which men have been placed, for while of course big gangs of men are wanted on general and railway construction and also in connection with long-shore work around our docks and grain elevators, we have placed many men in professional, commercial and business offices. Altogether men have been placed in 193 different positions as skilled workers, semi-skilled workers, unskilled workers, commercial, professional and business workers in addition to service of a personal or special character. This record shows more conclusively than any other could, the number of firms and individual employers making use of this Bureau and being assisted in finding satisfactory help.

During the year 7,285 men have registered in this office and of these 6,519 have been placed. The latter figure includes 179 men who have been placed in positions in other zones in Ontario from this office through the Clearance Office at Toronto, and 69 who have been placed in other Provinces through the Provincial and Dominion Clearance Offices. There has been no encouragement given to men to ship out of this district as they have all been wanted here throughout the year, consequently only these 248 men have been shipped to other zones of the Province and Canada. On the other hand we have placed in positions in this district during the year 367 men from other zones in Ontario, through the Provincial Clearance Office and 1,993 men from other zones in Canada, other than Ontario. In addition 30 women were placed, giving us a total placement directly from this office of 6,549. Placements secured from other zones of Ontario and Canada number 2,362 making a total of 8,911 persons having secured positions directly and indirectly through this office.

The above figures prove the necessity of the service we are rendering and the increasing value of the clearance system inaugurated by the Provincial and Dominion Governments. We have received many letters from employers testifying to their appreciation of the service rendered them, and have also received phone messages and verbal thanks for services rendered, both by employers and men Some adverse criticism also comes our way, which we are glad to hear, for, by the correction of errors better service is rendered.

From the opening of this office till the present time, all other things being equal, the man who has served overseas has received the preference in securing a position, and since the first of February 1919 until the 31st, of October 1920, a separate registration has been kept for returned men. Of the total number of placements made last year from this office directly 1,583 men were placed who had been overseas or 25.6% of all men placed through this office were returned men. About the same percentage of returned men might be reckoned as coming from other zones whoch would make 2,173 returned men in all, placed in this district, but of these 590 from other zones, we have not definite figures.

A return of the nationalities represented in our registration is interesting, containing as it does, not less than 33 nationalities, and the percentages of these nationalities are no less interesting as they disprove the statement made by some people that mostly foreigners register in this office. As previously stated, our year's figures give a total of 6,519 men placed in positions. Of these 337 were re-applications, so that our total actually represents 6,182 individuals made up as follows:—English speaking 4,109 divided as follows:—Canadians 2,644, English 866, Scotch 285, Americans 163, Irish 128, Welsh 7, East and West Indies 12, Isle of Man 1, Australia 1, South Africa 1, and one Ocean born. This leaves 2,073 registrations divided among foreign born men of 21 different nationalities made up as follows:—Austria 639, Finland 498, Russia 373, Sweden 106, Ukrainia

90, Norway 79, Poland 74, Roumania 62, Italy 59, Galicia 38, Denmark 11, Belgium 9, Hebrews 6, Germany 6, Hungary 5, Servia 5, Siberia 3, Holland 3, Armenia 3, China 2, Switzerland 2.

About 25% of the 2,073 foreign born registrants have taken out naturalization papers and are, therefore, Canadian citizens. It is rather surprising, the large proportion of men who can write their names in English, often being able to do this when they cannot spell their names verbally.

WAGES

Wages, during the year have continued their upward tendency in this district, particularly with regard to unskilled workers, in which class the rate has increased from 40c. to 45c. at the beginning of the year to from 55c to 60c. at the present time, (October 31st, 1920).

Among unskilled workers the eight hour day is not popular; they prefer to work the ten hours, and the eight hour day, except with skilled workers, is not much observed. Freight shed labor has increased from 50c. to 60c. and coal dock labourers from 50c. to 65c. per hour.

LABOUR UNREST

A strike of the shipyard workers occurred in June which kept some 900 men idle for three weeks; the strike was eventually settled by the Mayor instituting at the request of a committee of men, a poll carried on at the City's expense but managed entirely by a committee of the men on strike for and against continuing the strike. The result of the ballot was that those in favor of staying out did not get a majority, and the men returned to work at their old rate of pay.

A strike of steam fitters and plumbers and carpenters also occurred in June, the steam fitters and plumbers getting the rate they asked, $1.10 per hour the first day of the strike. The carpenters, however, were longer in securing their rate of $1.00 per hour for the city and 85c. per hour for the district outside the city limits. The rate is very generally paid at the present time. Since the 1st, of July there has been no serious unrest in labor circles, and the year closed with everything quiet.

SHIPPING MEN

We have made arrangements with the Baggage clerks and ticket agents of the Railways for shipping men out to the various camps and to railway work so that every man seeking work in the city or district gets the best possible service, free of charge. It is most satisfactory for men to pay their own transportation. If transportation is advanced an agent of the employer should accompany the men: if this cannot be done and fares are advanced, there is the risk that some of the men will not arrive at the work but will take advantage of free transportation to make a journey on their own account.

YOUNG UNSKILLED MEN

One of the most depressing symptoms of our present system of education is the large percentage of youths twenty years of age and under, who are totally untrained to follow the skilled trades in the industrial life of the community. Many of these youths are wandering over the wide expanse of the country, "beating their way," and such has been the demand for labor that they have had little difficulty in being sent from one place to another.

A great number of them are unreliable and have no sense of moral responsibility. Here is a condition of affairs that is receiving the careful thought of many women and men interested in the study of social problems, and, it will be seen that the proper training of the youth of Canada to fit them for the service most

suitable to their physical and mental capabilities, is a work of urgent and special need at the present time, and would tend to stop this irresponsible wandering of so many youths over the country doing themselves no good and causing a heavy movement in labor affairs that is expensive and wasteful.

WOMEN'S WORK

Port Arthur has no industries that call for the employment of girls except in laundry work. Positions open for women are therefore commercial or domestic. In commercial work the supply is about equal to the demand. In domestic work the demand is much greater than the supply. The women's department of the work in the Port Arthur Office is therefore only light, the returns for the year being as follows: Vacancies registered, 60; positions filled, 30; including housekeepers, domestic servants, cooks, hotel help, charwomen and stenographers. We would receive a very large registration of vacancies in Domestic help if we could secure the supply that would warrant us extending this part of our service.

SERVICE RENDERED

We have given information from this office to employers and workmen that has proved a source of help to employers seeking to know labor conditions and prospects, and to workmen regarding compensation for industrial accidents; how to secure engineer's and firemen's certificates; and when seeking positions of a special character we have given advice and assistance. We are consulted and called up for general information on all labor and industrial questions by individuals and societies and are always glad to give the best information we can and to be consulted in this way as it shows the Bureau is being recognized as a clearing house for information regarding such matters.

STEADY WORKMEN

While the number of placements made by an employment office is to a certain extent a criterion to calculate the usefulness of the office, it is by no means the best criterion. Our Employment Bureau is fulfilling its function best when it places the right man in the right position. That proves more satisfactory to the workman and the employer and results in steady employment for the workman and long service for the employer, thus reducing the overhead expense entailed in frequent changes. A great deal can be done in advising men and securing positions for young men and youths where they can advance. Employers, and we have several in this city, are doing public service when they make provision in their shops to give these men a chance to advance.

CASUAL JOBS

Men have been sent to odd jobs of less than a week's duration for such work as gardening, window cleaning, wood splitting, unloading and loading cars, etc. totalling 116 positions during the year.

ACKNOWLEDGMENTS

The Superintendent and Staff of this office desire to express their appreciation of the confidence placed in them by employers and managers of large industrial firms and industries that have consulted them in connection with their needs and the consideration they have shown when we have not always been able to supply their wants. We have done our best to be of service at all times. We have received help which has been valuable in securing good men through the co-operation of several of the Labor Unions and the officials of the Building Trades Federation and we hope this co-operation will continue and strengthen.

ST. CATHARINES

The local demand for men in the St. Catharines district exceeded the supply. The Superintendent states that, "During the summer it would have been

possible for us to have placed from 1500 to 2000 more workers in all occupations if they had been available and all the help we could secure was easily placed."

Unskilled labor was paid at 65c. per hour during the summer which made it difficult for the factories to secure help. Wage rates for unskilled and semi-skilled occupations in the factories ranged from 42½c. per hour, with a bonus, to fifty cents per hour.

The occupations which received the largest number of workers through the office included building construction, pipe line construction, road, factory and canal work and fruit picking.

There were 3,683 male registrations and 252 female registrations during the year. Employers asked for 3,826 men and 1,271 women, and 3,060 men and 203 women were placed by the Bureau during the same period.

ST. THOMAS

The Employment Bureau in St. Thomas is the only one which is operated with a single official without stenographic or other assistance. In spite of this fact, however, the office concluded a very successful year in October, 1920, with a total of 1,556 applications for work, and 1,430 placements. On account of its position as a railway centre, 50 per cent. of the placements in St. Thomas were in occupations directly or indirectly connected with railroad operation. Local factories, and the farms in the district received the balance of the help distributed by the Bureau.

SARNIA

Any of the offices which are situated on the borders of the Province are geographically restricted in the possibilities for placement work. In the case of Sarnia and Windsor, however, this handicap is overcome by the additional number of "industrial tourists" who journey from one province and from one country to another, in search of improved or varied opportunities for employment. As a result, the Sarnia Office, although located in a medium-sized city, was instrumental in placing 1,181 persons in positions during the year.

The widening of the scope and influence of the office is seen from the fact that the registrations and vacancies show a continuous increase from the beginning until the end of the year. Systematic canvassing of employers, and a conscientious effort at all times to render the service for which the Bureaus are opened, have been instrumental in achieving this result.

SAULT STE. MARIE

Because of its strategic location, from an industrial and geographical standpoint, Sault Ste. Marie is a most important employment centre. This fact is reflected in the volume of business transacted by the Bureau in Sault Ste. Marie, which placed 8,854 persons in employment during the fiscal year. The fact that employers called for 11,220 workers in the same time, is an indication of the industrial activity in that city, and also in the other portions of the district served by the office.

The largest number of registrations in any one month occured in May, when 1,003 men applied for assistance in securing work, and were placed either locally or near the city. In the six months ending September 30, 1920, employers asked for more than six thousand men, the majority being for various forms of lumber operations. The local industries, which are of a varied nature, including steel mills, pulp mills and other allied occupations, also absorbed a number of the applicants. Dock work, and the orders placed by steamship captains, also received the attention of the office.

STRATFORD

The Stratford Office placed 435 persons in positions in the first seven months of the fiscal year. As the number of employers and employees who were using the office showed a tendency to decline from month to month, rather than to increase, it was felt that the office had served the purpose for which it was opened, namely to assist in the demobilization period, and it was accordingly closed in June, 1920.

SUDBURY

There is probably no other city of its size in Ontario which sees so many "strangers within its gates" throughout the entire year as Sudbury. It is, therefore, a most important center from an employment standpoint, and the records of the office show placements amounting to 9,339 persons, during the twelve months. There were orders for more than 13,000 men placed by employers, which indicates that the demand exceeded the supply during 1919-20. In the month of October, 1920, orders were placed for 1,722 men, which amounted to almost double the number of applicants in the same period.

The mining and lumbering occupations absorbed the majority of the workers who were placed by the Sudbury Office, but a large number were also placed in various forms of railway and bridge repair work.

TIMMINS

The work of the Timmins Office has been confined, necessarily, to the placement of men in two main occupations,—mining and lumbering. There is such a dissimilarity in these two kinds of work that there has been relatively little "switching" from one to the other, each industry having its own type of worker.

In the lumber industry, the demand for men has come from tie, lumber, and pulp camps, as well as from the new saw mills, and the two near-by pulp mills. In mining, the demand has been principally for men accustomed to the various occupations connected with gold and silver mining. Taking working hours in the two industries into consideration, the mines and the lumber camps have afforded practically similar remuneration.

The arrangement for reduced transportation for workers secured through the Employment Service of Canada has been of marked advantage in placing men in the Timmins district. Similarly, the employment clearance system has enabled the local superintendent to fill orders which he could not have attempted to fill had he been operating as a unit, exclusive of other offices in the system. Practically fifty per cent of the placements credited to the Timmins Office are "transfers into zone." that is, the placement of the men secured from outside the immediate district covered by the office. Employers called for 4,831 workers during the year, and 3,287 placements were made.

TORONTO

MEN'S INDUSTRIAL SECTION

As Toronto is the largest city in the province, it has represented the greatest variety and extent of problems from the point of view of employment. There is reason to believe that the unemployed from other centres flock into the cities in times of depression, aware of the fact that there are more opportunities for employment in a large city than in a small one, but overlooking the fact that there are also more applicants for the vacancies. Realizing that an industrial depression was imminent, the officials of the Toronto Office seized every opportunity to dissuade out of town workers from coming to the city unless they were coming to definite positions of assured permanency.

Toronto also experienced the greatest degree of difficulty in connection with the distribution of the Federal Government's fund for the relief of ex-service men unavoidably unemployed. The registrations at the Bureau in the four weeks previous to the establishment of this fund were 1,758 in number. Following the announcement of the Government's intention to take care of the veterans who were out of work, the registrations rose to 3,481 in the next four weeks, and an additional 9,268 were registered in the succeeding month. Investigation of the bona fides of each case, and the distribution of the actual grant rested with the Patriotic Fund and the Department of Soldiers Civil Re-Establishment, but the certificate as to the lack of suitable employment was supplied by the Government Employment Office.

There were in all, 42,633 registrations in the men's industrial section during the year, while 21,398 men were asked for by employers. Fourteen thousand and fifty five men were referred to positions, and definite word of placement received in 7,512 cases.

The city was canvassed for employment opportunities, and every attempt made, with the limited staff, to establish the closest possible co-operation with the various industries in Toronto, and with the immediate district.

MEN'S FARM SECTION

The most satisfactory results from the standpoint of placements, were secured in the Men's Farm Department. There were 4,748 applications for farm work during the year: 4,296 orders for farm help were received, and 3,250 placements made.

The months of July and August saw the greatest number of placements, over 1,000 men being referred to farm work in the eight weeks ending September 4. The importance of this department as an outlet in times of threatened depression cannot be over-emphasized, as it provides a medium through which the farm-bred young man who has been attracted to the city by ostensibly higher wages may be once again placed on the land, to his own advantage, and the advantage of the urban community.

PROFESSIONAL AND BUSINESS SECTION

Realizing that the large number of ex-service men with special professional and business qualifications required assistance in re-establishing themselves, the Department of Soldiers Civil Re-Establishment established a Professional and Business Employment Section. The office was situated in the Ontario Government Employment Bureau, and the closest co-operation existed between the two departments.

Between November 1, 1919 and July 10, 1920, the office placed 578 specially trained men in positions. This is an exceptionally good showing, taking into consideration the prevailing industrial situation and the relatively limited number of openings for engineers, draughtsmen, and other technically trained men.

DACAPPED WORKERS' SECTION

Another important phase of employment work which was dealt with by the Department of Soldiers Civil Re-Establishment opened a Professional and Business Employment Bureau, was the placement of the handicapped workers. Although the majority of the cases were men whose disabilities were due to war service, the handicapped civilian also received every consideration.

Three hundred and thirty nine placements were made during the six months that the section was in operation. This may be regarded as a most favorable showing and indicates the need for special consideration in the placement of workers whose physical or mental disabilities place them at a disadvantage in seeking employment.

WOMEN'S INDUSTRIAL SECTION

During the year 1919--20 the factory department of the Bureau accomplished a considerable volume of work, but the number of placements made was smaller than the previous year. This fact was due perhaps to existing industrial conditions. For the first half of the year factories were very busy and workers were not available. Quoting from a report made in November 1919, "Employers appreciated our inability to obtain help, for they stated that repeated advertisements brought them practically no results." At that time there were 600 orders left unfilled on the Bureau files at the end of the week, Early in March a special report was prepared in the Bureau on the shortage of women workers in Toronto. The shortage at that time was estimated at about 1,330 in the various industries. In May there was a decided change, affecting the shoe and clothing industry first. Shortly after the appearance of the Budget of the Minister of Finance these industries became slack. Dulness increased in these and almost every other industry until at the end of October we had experienced the beginning of what threatened to be a long period of serious unemployment. Such industrial conditions made the placement work of the Bureau difficult,—for the first half of the year there was the decided shortage of workers and for the second half the decided shortage of work. The more normal in-between period was almost negligible.

Although employers asked for 4,440 workers throughout the year, and 1,489 applicants registered for employment during the twelve months, it was possible to make only 678 placements, due, largely to the fact that the time when the workers registered and the employers called for assistance did not happen to coincide.

WOMEN'S CLERICAL DEPARTMENT

The year was marked by a decided increase in the volume of work done in the clerical department of the Bureau. This fact indicates a definite need for the women's department and also the success of the department in meeting the need. Some firms depended altogether on the department for their supply of office help and many new employers were added to the list of Bureau clients during the year. Two thousand eight hundred and ninety orders were received and about 75% were filled; 2,148 placements were made, an increase of almost 1,000 over last year. The greatest activity in this work was in April, May, September and October. December was the smallest month with 128 placements.

The salaries paid varied little from those of last year. During the summer when there was a shortage of workers, due to the holiday season, salaries were as high as $30. per week and towards the end of the year a tendency towards reduction in staff, because of general industrial conditions, caused a drop in salaries.

The work of the clerical department was not confined to office workers only. In November, 15 workers were placed in various centres where vaccination clinics were being held under the Department of Public Health. During the "Flu" epidemic in February the Red Cross Society asked for the service of a Bureau worker in organizing and operating an Emergency Bureau for Nurses in connection with the Department of Public Health. When this was under way 10 nurses were sent from the Government Bureau for such work. An industrial nurse was placed in a plant, a position found for a "social secretray," and a university undergraduate undertook the work of special teacher—a case of arrested development. Three university graduates were placed with initial salaries of $1500. The remark of one organization in this connection should be of interest.—"We could not hope to take any stand in matters of health and general welfare and expect a girl with university education to live on less than $1500."

WOMEN'S FARM DEPARTMENT

During the past year the policy of the Women's Farm Department differed in outline from that of other years. In the Spring Session of the Legislature an Amendment to the Factory Shop and Office Building Act was passed containing regulations for the management of camps for women. The Director of the Women's Farm Department was made responsible for the inspection of every camp to see that the standards called for in the regulations were maintained. All applications for Camp Permits were received by her and on her approval were forwarded to the Department of Labour, from which office the permits were granted. Twenty-one farmers were granted permits, but of these, three changed their plans and did not open camps. Of the remaining number, two were able to obtain all the labour needed, leaving sixteen who looked to this Department for workers.

The most difficut time to supply help was when strawberries were at their best. The crop was ripe while the students and teachers were still in school and business girls considered it too early in the year to begin holidays. Also, a great many women refused to work in strawberries owing to the severity of the labour. Berries are a big paying crop and workers are more in demand then, than at any other given time during the entire fruit season. This year the need was not met by more than one-half. With the exception of this shortage no camp was seriously disabled on account of the lack of workers.

In slack times the numbers in a camp lowered to eight or ten, and at other times ran up to thirty or more, averaging about fifteen all through. One advantage this year had over other years was, the slow ripening of fruit which enabled a few hands to keep up with the harvest.

The variety of work done by women runs as follows:—hoeing, weeding, planting and gardening, and the harvesting of every kind of fruit for shipping and factory purposes, packing peaches and apples. Four girls assisted for six weeks in the packing of fancy apples for English markets.

Wages were better this year; twenty cents an hour was offered for the summer work and twenty-five cents an hour for all Fall work. Piece rates were high enough to make it possible for a number of girls to earn as much as twenty dollars a week when the picking was good, but the average all through ran from ten to fifteen dollars.

While the regulations called for a ten-hour day, practically all fruit growers were in favor of nine hours, believing that the women did not become over-tired and consequently did better work.

This Department placed house-mothers and cooks in every camp applying for the same and every camp but one defrayed the expenses of household management. The amount of board charged was from $4.50 to $5.00 a week per worker.

The classes mostly sought were students, teachers and business girls; they are more physically fit, and adapt themselves to work more readily than others. Early in the season a circular letter was sent to all centres of education for women and women's residences offering an opportunity to work for the holidays.

Twenty-one English girls were sent out on arrival and in every instance did satisfactory work.

The work of women on mixed farms has not proved practical; the duties are too heavy and constant to allow for success. On small fruit farms where weeding, hoeing and cultivating were to be done there was a fair demand. Twenty-five girls were placed in this way.

A few English women who had given service in England in the Women' Land Army were anxious to obtain work here in dairies, but no vacancies occurred.

The domestic situation in the farming communities is somewhat easier than a year ago. Of the 66 generals placed, 35 were girls from the Old Country. Of the 24 house-keepers placed 21 were women with children and only 6 of these were immigrants. A great number of English and Scotch women applied for house-keeping positions, especially women with from one to three children, but it was difficult to place them without some Canadian experience. Some of them consented to work as generals until they were capable of taking entire charge of a home.

No housekeeper with a child was placed under $20. a month, and women with no encumbrances were paid $25. and $30. and sometimes $35.

The serious depression in labor is already encouraging women to go into domestic service, although there will always be a shortage for country vacancies owing to the fact that not many women care to adapt themselves to farmhouse duties.

During the war a new activity was opened up for women, and indicates every sign of continuing. Fruit picking was at that time placed on a dignified, enjoyable and healthful basis. As war work the wages were not particularly attractive, but there has been a steady rise until last summer numbers of women were able to save one hundred dollars from their summer's earnings.

Up to the present time there has been a scarcity of man labor for farm work, but to what extent labour conditions as they now exist will affect the opportunities of women on fruit farms will have to be worked out. This coming season will be the first normal season we shall have had by which we shall be able to judge things correctly.

Laboring men have never been employed to pick fruit so much as Indians and Poles, or what is known as local help. Indians are very unsatisfactory in that they leave at most unexpected times, and often in the midst of the harvest strike for more pay. Poles have practically the same faults and to add one more take a great many small children along. Local help is expensive help—they insist on carrying away quantities of fruit at a small price and only pick during the height of the season. If they become offended at some trifle they leave one farm and go to another.

Women workers living in camps on or near the farms on which they work are on the job early in the season and wait until the work is all cleaned up. They are able when necessary to work in early morning or late in the evening. If there is packing or shed work of any kind they can fit in intelligently. They are more careful in their work, so that fruit for shipping goes out in a better condition and at the same time they pick clean and do less harm to the fruit plant.

There is no doubt at all but that a great many women will be glad this next summer to go out into the country and earn money. The work is hard but healthful and the food is of the best. Since labor conditions are just as trying for women as for the men it seems only fair to give them an equal opportunity.

As nearly all pickers are placed in groups it requires a little care in the selection of members for each group who will be congenial and work well together. For instance, one camp last year was made up entirely of High School girls. They did good work and enjoyed the summer's associations. Another camp was made up of school teachers with the exception of one or two business girls and was probably the most really successful camp of the year. A camp at Beamsville was composed of a better type of working-girl and received great commendation throughout the community, for its efficiency and conduct. In this, as in all lines of employment service, an intelligent and personal interest must be exercised.

Employers asked for 1,136 workers, 517 of whom were supplied by the Bureau, the demand exceeding the supply by about fifty per cent.

As an evidence of the appreciation of the fruit growers a letter—which is typical of many others received—is reproduced herewith:

Niagara-on-the-Lake,
Nov. 8th, 1920.

Dear Miss Tompkins:—

I now take great pleasure in reporting to you the appreciation of the Fruit Growers of the Niagara district for the benefit received from the successfully managed Department of women workers.

In speaking of the profitable results of women workers in comparison with other labor, the man labor that we were able to receive this past year was of a very inferior class and was of very little use, as the most of them wanted only two or three days' work at a time and it comes rather expensive to farms with such help.

I found that the workers I received this year were great workers, honest and dependable in their work and I feel justified in saying that the girls I received this year were quite superior in every respect than ever before. I do not at the present moment realize any chance for improvement in the management of camps.

I agree that a nine-hour day is enough for any girl to pick fruit except in case of an emergency, which does not occur very often.

I again thank you, Miss Tompkins, for the careful attention you have given my camp which greatly assisted in making it such a great success. I hope since you have already had such good experience that you will see fit to continue in the work.

I will mention that I am prepared to make application for twenty-five girls for next summer.

Thanking you for your co-operation, I am

Yours truly,
(Sgd.) Albert E. Pay.

HOUSEHOLD WORKERS' SECTION

For the fiscal year 1919-20, the supply of all classes of household workers both for private homes and for institutions, was inadequate to meet the demand until about September, when some classes of institutional workers became very plentiful.

In December, when the press reported that Canada could expect parties of British Household workers from time to time, the Bureau became besieged with orders—"For one of those Old Country Girls." It is not advisable to have the papers report arrivals of parties unless official. These false reports tend to handicap the department, as employers call in great numbers and are very much disappointed, after a lengthy explanation has been given, to find that there were no new registrations, making the work in the office much more difficult.

Among the immigrants who came during the year, there were very few who were willing to take positions in private homes as cook-generals, the majority being unaccustomed to it, and this is what Toronto and the nearby towns are crying out for. At first we had no difficulty in placing the institutional workers, as there was a great shortage, but as the year drew to a close we found it more difficult to place them, especially in a case were two friends or sisters wanted to go together.

As a whole the type of immigrant arriving has been satisfactory, with the exception of a few, who have been reported as most undesirable, some having to be deported.

The demand for cook-generals has been very urgent during the whole year. Immigration or the laying off of factory workers has not relieved the situation in the private homes as was expected. The ex-factory worker does not seem to fit in to the needs of the private home.

The department's biggest problem is, placement of the women who apply for positions where they can take a child. Some even hope to get employment where they can take two or sometimes three children. We were successful in placing 66 women with children, and one with two children, making a total of 67 placed.

Our day-work placements for the year were almost 13,000, this being somewhat less than the previous year. The decrease was owing to the fact that the demand for the casual work was not so great as the year before, when the influenza was raging. However, permanent placements showed an increase, there being nearly 500 more placements, this being partly due to immigration.

In January the casual workers' rate was increased from 25c. to 30c. an hour —this being the prevailing rate.

During the year 4,255 applications were received for permanent household work, while employers filed orders for 10,148 workers, indicating a great discrepancy between orders and applications than is seen in any other phase of employment.

In casual household work the supply and demand were more nearly equal, orders being received for 14,522 workers, 12,869 of whom were supplied.

HEAVY LABOUR DEPARTMENT

During the winter of 1919-1920 when the Heavy Labor Bureau was situated in offices on Front Street loaned through the courtesy of the Department of Colonization, placements were made both in and outside the city. On moving the office to 47 King Street next door to the main Bureau, all city work was transferred to the Central Office with a consequent slump in the number of placements registered to the credit of the Heavy Labor Bureau.

Over 10,000 men applied for work at the Bureau, and 8,892 placements were made. Approximately half of these placements were in connection with track and extra gang work on the Canadian National Railways.

Of the 8,892 placements, 4,058 were soldiers, 3,180 of whom went to laboring jobs, and 878 to bush work.

Eight hundred and thirteen men were registered for and promised definite positions but failed to return to go to the work at the time the parties were leaving.

In May pick and shovel laborers in the city were receiving 50-55c. an hour, while out of the city they were receiving 45-50c. an hour. Bushmen were receiving $65-75. a month and board. C.N.R. trackmen (extra gang) 44c. an hour. In June bushmen's wages were increased to $70-75. Mill hands received $4.25-4.75 a day and muckers 59c. an hour. In July construction laborers received 50-58c. an hour. In August extra gang laborers on the C.N.R. were raised to 50c. an hour. Machine runners for the mines were required at 66c. an hour.

In September bushmen's wages increased to $70-85 per month and board: Muckers' wages $4.50 a day.

During October, 1920, bushmen's wages varied from $65. to $85. a month and construction laborers 50-60c. an hour.

TORONTO—BLOOR STREET OFFICE

With a view to assisting in the re-establishment of the Toronto veterans, a branch of the Employment Bureau was opened on Bloor Street in the West end of the city in 1918, and continued in operation until June, 1920.

Between November 1, 1919 and June 12, 1920, 1,542 applications for work were received, 1,192 vacancies were reported and 1,025 placements made. It was ascertained, however, that a central office, located in the main business section of the city was more satisfactory, and as stated above the Bloor Street Office was closed.

WELLAND

The Employment Bureau in Welland was closed in June 1920, and the territory divided for employment purposes between the offices in St. Catharines and Niagara Falls.

Between November 1, 1919 and June 12, 1920, 562 applications were received by the Welland Office and 384 placements were made.

WINDSOR

Windsor ranked only a little below Ottawa and Hamilton in the volume of employment business transacted during the year. There were 5,969 applications for work, 5,682 calls for workers in the district and 5,726 placements effected.

Reporting on the situation the Superintendent states:—

"During the early spring there was an enormous demand for help of all kinds at practically the highest rate of wages paid in any part of the Dominion. We were very successful in filling these orders locally, and through the assistance of the various clearing houses. It would have been possible to have placed a larger number of men from other points if there had not been such a shortage of housing accommodation. Several of the manufacturers built dormitories, relieving the situation somewhat."

The Windsor Office referred more than 700 men to bush work, this movement of labor being particularly noticeable during the last month of the fiscal year, when the closing of many factories in Detroit re-acted unfavorably on the industrial situation in Windsor.

WAGES

Although the following table is not absolutely guaranteed to be 100 per cent. accurate in every case, it is reprinted because it indicates certain wage-trends over the period between January 1920 and October 1920. It is based altogether on orders placed with local employment superintendents by employers.

WAGE SUMMARY

City	Occupation	January Wage		October Wage	
Belleville:					
	—Labourers	35c	hour	50c	hour
	—Bricklayers	60c	hour	60c	hour
	—Carpenters	50-60c	hour	60-75c	hour
	—Quarrying Labourers	40c	hour	47½c	hour
Chatham:					
	—Bricklayers	80-$1.00	hour	$1.00	hour
	—Carpenter	60-65c	hour	65c	hour
	—Farm Help (Single)	$50-$55.	month	$50-$60	month
	—Farm Help (Married)	$600-$750	year	$700-$900	year
	—Teamsters	$18-$21	week	$20-$22.50	week
Cobalt:					
	Machine Runners	$4.75	day	$5.25	day
	—Machine Runners' helpers	$4.25	day	$4.75	day
	—Timbermen	$4.75	day	$5.25	day
	—Muckers	$4.-$4.25	day	$4.-$4.75	day
	—Powdermen	$4.75	day	$5.25	day
	—Blacksmiths	$5.25	day	$5.50	day
	—Surface Labourers	$3.50-$3.75	day	$4-$4.50	day
	—Carpenters	55-80c	hour	75-85c	hour

City.	Occupation.	January Wage.		October Wage	
Fort William:					
	—Carpenters	65-70	hour	$1.00	hour
	—Plasterers	90c	hour	$1.00	hour
	—General Labourers	40-50c	hour	50-65c	hour
	—Teamsters	$70-$75	month	$120	month
	—Pipe Fitters	60c	hour	$1.00	hour
	—Machinists	68c	hour	90c	hour
	—Sectionmen	40c	hour	45-48½	hour
	—Painters	60c	hour	65c	hour
	—Bookkeepers	$75-$100	month	$75-$125	month
	—Accountants	$100-$125	month	$100-$150	month
	—Barbers	$25-$30	week	$25	week
Guelph:					
	—Teamsters	$18-$22	week	$18-$24	week
	—Carpenters	55c	hour	85c	hour
	—Office Clerks (Inexperienced)	$10-$15	week	$10-$15	week
	—Office Clerks (Experienced)	$15-$20	week	$15-$20	week
	—Lumbermen	$60-$65 &	board	$60-$75 &	board
	—General Labourers	35-42½c	hour	40-50c	hour
	—Rubber Tire Builders (Piecework)	$4-$7	day	$4-$7	day
	—Machinists	35-60c	hour	35-75c	hour
	—Toolmakers	50-75c	hour	50-75c	hour
	—Coremakers	$3.50-$5	day	$3-$5	day
	—Woodworkers	$3-$4	day	$3-$4	day
	—Telephone Linemen	40c	hour	45-50c	hour
	—Electricians	60-70c	hour	60-75c	hour
	—Chauffeurs	$20-$25	week	$20-$25	week
	—Painters	45-60c	hour	45-65c	hour
	—Bricklayers	70-75c	hour	$1.00	hour
Hamilton:					
	—Labourers	40-45c	hour	43-65	hour
	—Machinists	60-70c	hour	60-70c	hour
	—Carpenters	70-77c	hour	85-90c	hour
	—Farm Help (Single)	$50 and	board	$40-60 and	board
	—Farm Help (Married)	$65 and	board	$50-75 and	board
	—Toolmakers	60-80c	hour	60-80c	hour
	—Truck Drivers	$18-$25	week	$18-$25	week
	—Cranemen	$162	month	$162	month
Kingston:		June Wage			
	—Farm Help	$40-60	month	$40-60	month
	—Bricklayers	75c	hour	85c	hour
	—Carpenters	75c	hour	75c	hour
	—Painters	65c	hour	65c	hour
	—Plumbers	70c	hour	80c	hour
	—Electricians	70c	hour	70c	hour
	—Building Labourers	45-50c	hour	45-50c	hour
	—Bakers	$30	week	$30	week
	—Boilermakers	55c	hour	63c	hour
	—Machinists	51c	hour	70c	hour
	—Weavers	$24	week	$24	week
	—General Labourers	40-50c	hour	40-50c	hour
	—Marine Firemen	$95 and	board	$95 and	board
	—Job Printers	$25-$35	week	$25-$35	week
	—Pressmen	$20-$30	week	$20-$30	week
Kitchener:					
	—Building Labourers	70c	hour	50-60c	hour
	—Carpenters	75-80c	hour	80-90c	hour
	—Bricklayers	$1.00	hour	$1.00	hour
	—Electricians	60c	hour	60-85	hour
	—Plumbers	85c	hour	85c	hour
	—Painters	60c	hour	55-70c	hour
	—Cement Finishers	60c	hour	60-90c	hour
	—Machine Assemblers	55-70c	hour	70-75c	hour
	—Cabinetmakers	50-60c	hour	55-65c	hour
	—Rip Sawers	55-60c	hour	50-60c	hour
	—Machine Hands	50-55c	hour	50-55c	hour
	—Wood Turners	50-70c	hour	55-70	hour

City.	Occupation.	January Wage	October Wage.
London:			
(Women's Dept.)			
	—Exper. Bookkeepers	$47.50-$75 month	$52-$80 month
	—Stenographers	$8.00-$20 week	$60-75 month
	—Clerical Help	$32.50-37.50 month	$10-$12 week
	—Cooks (Hotels and Institutions)	$30-60 month	$50 month
	—Cooks (Private)	$30-40 month	$30-50 month
	—Domestics	$20-40 month	$20-40 month
	—Waitresses	$20-25 month room and board	$25-30 month room and board
	—Waitresses (Cafes)	$6.00-8.00 week and board.	$12.00 week
	—Day Workers	$1.50-2.50 day	$2.25-3.00 day
Niagara Falls:			
	—Carpenters	75c hour	80c hour
	—Machinists	65-70c hour	82c hour
	—Riggers	65c hour	75c hour
	—Electricians	75c hour	75c hour
	—Firemen	45c hour	55c hour
	—Labourers	40-55c hour	50c hour
Ottawa:		June Wage	October Wage
	—Stonecutters	87½c hour	$1.00 hour
	—Carpenters	85c hour	85c hour
	—Bricklayers	$1.00 hour	$1.00 hour
	—Plasterers	85c hour	85c hour
	—Plumbers	80c hour	80c hour
	—Steamfitters	80c hour	80c hour
	—Electricians	80c hour	80c hour
	—Painters	75c hour	75c hour
	—Paperhangers	80c hour	80c hour
	—Labourers	60c hour	60c hour
	—Machinists	65c hour	82c hour
Pembroke:		June Wage	October Wage
	—Farm Hands (Single)	$50-$60 month	$50-60 month
	—Carpenters	85c hour	85c hour
	—Bricklayers	65c hour	65c hour
	—Plasterers	65c hour	65c hour
	—Domestics	$20-$25 month and board	$20-$25 month and board
	—Cooks (Male)	$100-125 month and board	$90-$100 month and board
	—Cooks (Female)	$25-40 month and board	$25-30 month and board
	—Labourers	40-44c hour	40-50c hour
	—Sawers	$7-7.50 day	$7-7.50 day
	—Setters	$6-6.50 day	$6-6.50 day
	—Doggers	$5-6 day	$5-6 day
	—Mill assistants	$3.85 plus 25c	$3.65-5 plus 25c
	—Teamsters (Bush)	$65-70 board	$70-80 board
	—Pulpwood Loaders	$4-5 day	$4-5 day
	—Blacksmiths	$4.50-5 day	$5-$5.50 day
	—Logmakers	$65-70 board	$70-80 board
	—Roadcutters	$60-65 board	$60-70 board
	—Blacksmiths	$100-115 month	$100-125 month
	—Factory Labourers	30-55c hour	30-55c hour
Peterboro:		January Wage	October Wge
	—Farm Help	$30-40 month and board	$40-75 amonth and board
	—Bricklayers	75c hour	90-$1.00 hour
	—Carpenters	67½c hour	75-85c hour
	—Painters	50c hour	65c hour
	—Building Labourers	50c hour	50-55c hour
	—Barbers	$18-22 week	$18-25 week
	—General Labourers	32½-54c hour	35-50c hour
	—Moulders	75c hour	81½-85c hour
	—Machinists	50-75c hour	65-80c hour
	—Foundry Helpers	40-50c hour	45-55c hour
	—Sectionmen	30-40c hour	35-45c hour

City.	Occupation.	January Wage.		October Wage.	
Port Arthur:					
	—Builders' Labourers	50c	hour	60c	hour
	—Cooks	$100-$120	board	$110-130	board
	—Coal Dock Labourers	55c	hour	55c	hour
	—Bushmen	$60-65	board	$70-80	board
	—Carpenters	75c	hour	85-$1.00	hour
	—Riggers (Shipyard)	55c	hour	60-65½	hour
	—Bolters	49c	hour	49c	hour
Sarnia:					
	—Bricklayers	75-90c	hour	86½-$1.00	hour
	—General Labourers	40-55c	hour	40-55c	hour
	—Carpenters	60-75c	hour	70-75c	hour
	—Painters	55c	hour	65-70c	hour
	—Plumbers	55-65c	hour	85c	hour
Sault Ste. Marie:					
	—Carpenters	65c	hour	65c	hour
	—Cooks (Bush)	$90-125	board	$90-140	board
	—Miners	$4.75	day	$4.75	day
	—Muckers	$4.25	day	$4.25	day
	—Mine Labourers	35c	hour	35c	hour
St. Catharines:		June Wage		October Wage	
	—Machinists	70-80c	hour	85-$1.00	hour
	—Carpenters	70-80c	hour	85c	hour
	—Assemblers	40-66c	hour	50c	hour
	—Farm Help (Single)	$40-50	board	$40-60	board
	—Bricklayers	$1.00	hour	$1.00-1.05	hour
	—Painters	75c	hour	75c	hour
	—Conductors	40c	hour	40-45c	hour
	—Motormen	40c	hour	40-45c	hour
St. Thomas:		January Wage		October Wage	
	—General Labourers	40c	hour	40-55c	hour
	—Carpenters	55c	hour	75c	hour
	—Machinists	72c	hour	85c	hour
	—Plumbers	65c	hour	75c	hour
	—Tinsmiths	65c	hour	75c	hour
	—Bricklayers	75c	hour	$1.00	hour
	—Teamsters	$24	week	$25	week
	—Farm Help (Single)	$40	board	$40-50	board
	—Farm Help (Married)	$700-800	year	$500-700	year
Windsor:					
	—Bricklayers (Union rate)	87½c	hour	$1.25	hour
	—Bricklayers (Prevailing rate)	$1.25	hour		
	—Carpenters (Union rate)	72½c	hour	$1.00	hour
	—Plumbers	96c	hour	$1.06½	hour
	—Painters	60c	hour	$1.00	hour
	—Electricians	90¾c	hour	$1.00	hour
	—Bricklayers Labourers	50-60c	hour	75-90c	hour
	—Plasterers' Labourers	60-70c	hour	$1.12½	hour
	—General Labourers	50-60c	hour	60-75c	hour
	—Clerks (Office)	$90-150	month	$90-150	month
	—Machinists	50-80c	hour	75c-$1.00	hour
	—Toolmakers	70c-$1.00	hour	90c-$1.00	hour
	—Teamsters	$25.	week	$30-35	week

EMPLOYMENT CLEARANCE SYSTEM

As has been stated elsewhere in this report, the various Bureaus in the Employment Service of Canada are linked together by an employment clearance system, which enables superintendents to draw from some other section of the Province, or the Dominion, workers who are qualified to fill local positions for whom no applicants are available. Without reviewing in detail the technique of this clearance system, it may be stated that the telegraph and telephone facilities are utilized where necessary, in order that the service rendered may be as rapid and efficient as possible.

The arrangement made by the Federal Government with the railroads, and extended to the Provincial Employment Offices allows Superintendents to issue reduced transportation certificates to workers who are proceeding to employment at a distance of more than 116 miles, and who have secured their positions through the local employment bureau. This concession has greatly facilitated the extension of the Employment service, and has been of very noticeable value to the individuals who have enjoyed this privilege.

On page 46 will be found a table summarizing the clearance Activities of the Ontario Offices, during the year ending October 31, 1920. It will be seen that more than twelve thousand men were transferred from one employment clearance zone to another, within the boundaries of the Province, while 1,456 men and 12 women were transferred to work in other provinces of the Dominion. In the same period Ontario received from other provinces 2,903 workers who were brought in to fill positions for which local men were not available.

Of the 2,903 who were brought into Ontario, 1,993 entered the Port Arthur district. The city of Winnipeg has been for a quarter of a century the natural labor centre for the cities at the head of the lakes, which accounts for the large number of workers entering the Western section of Ontario.

Toronto shows the largest number of extra-zone placements. This is due largely to the number of railway construction and lumber workers who come to the large cities after a period of comparative isolation in connection with their employment. Ottawa is second, with 3,319 out of zone placements, the majority of whom were bushmen.

On page 47 will be found another table referring to the clearance activities of the Bureaus, analyzed by industrial groups. Out of the total number of workers transferred between one zone and another, within the province, 12,716, there were 7,462 placed in lumbering operations, and 3,402 in general laboring work. Six hundred and eighteen building tradesmen were also placed in out of zone positions, and the remaining 1,234 were divided among nine other industrial groups.

Of the 1,468 persons who were transferred out of Ontario, 998 were registered as bushmen or general laborers. The balance were distributed among eight other groups, 334 belonging to various agricultural occupations.

As previously stated Ontario received 2,903 workers from other provinces. Of this number 2,112 were either bushmen or laborers, and the remainder were registered in eleven other industrial groups.

Summary of Employment Clearance Activities by Offices for year ending October 31 1920.

Office	Transfers out of Zone.		Interprovincial Out of Ontario		Transfers. Into Ontario	
	Men	Women	Men	Women	Men	Women
Arnprior						
Belleville	1					
Brantford	3					
Brockville	62	1				
Cobtham	11		23		5	
Chaalt	103		2		1	
Cornwall	38	2		1		
Fort William	46		265	1	8	
Galt						
Guelph	10					
Hamilton	310	1	3	1		
Kingston	114	1	1	1	1	
Kitchener	42					
Lindsay	1					
London	141	3	3			
Niagara Falls	61					
North Bay	583		739	3	8	
Orillia	1					
Oshawa	3					
Ottawa—Dalhousie St	1,056		127			
Ottawa—Queen St	2,263	13	117	2	15	
Owen Sound	3					
Pembroke	617	7				
Peterborough	183		1			
Port Arthur	179		69	1	1,993	1
St. Catherines						
St. Thomas	21					
Sarnia	10			1		
Sault Ste. Marie					161	
Stratford						
Sudbury	862		46		702	
Timmins	116		5		8	
Toronto—45 King St	908	6	1	1		
Toronto—47 King St	4,464		53			
Welland	3					
Windsor	466	1	1			
Totals	12,681	5	1,456	12	2,902	1
	12,716		1,468		2,903	

Summary of Employment Clearance Activities by Industrial Groups for year ending October 31, 1920.

Industry	Inter-Zone Transfers		Interprovincial Transfers.			
			Out of Ontario		Into Ontario	
	Men	Women	Men	Women	Men	Women
Agriculture	26	9	333	1	3	.....
Building Trades	618	.....	37	.....	27	.....
Commercial	25	1	8	2	7	.....
Domestic and Personal	293	8	18	3	7	1
Labouring General	3,402	.....	694	.....	587	.....
Lumbering	7,462	.....	294	.....	1,545	.....
Manufacturing	428	11	3	.....	14	.....
Professional	14	2	5	4	2	.....
Mining	211	.....	17	.....	177	.....
Railway Construction	40	.....	.....	.....	324	.....
Railway Operation	37	.....	.....	.....	57	.....
Shipping and Longshore		.....	.....	.....	64	.....
Miscellaneous	125	4	47	2	88	.....
	12,681	35	1,456	12	2,902	1
Totals	12,716		1,468		2,903	

ANNUAL REPORT—ADMINISTATION OF EMPLOYMENT AGENCIES ACT

During the year ending October 31st, 1920, the number of Private Employment Agencies in the Province of Ontario was reduced by two. The license held by Mr. Robert Blair of Sault Ste Marie, Ontario, was cancelled on the recommendation of the local Chief of Police. The license formerly held by Mr. Deschaumbault was automatically cancelled by his death in November 1919.

Throughout the year the agencies have been required to make monthly reports of their activities to the Department of Labor and the offices have been inspected as required.

STATIONARY AND HOISTING ENGINEERS

BOARD; J. M. BROWN, Chairman; Chas. Moseley, Assistant to the Chairman; W. Corrigan, G. W. Porter, Assistant to the Board.

Office: Spadina Crescent, Toronto.

Number of Stationary Engineers' Certificates granted for the fiscal year ending October 31st, 1920			9,941
Candidates who qualified by examination (Fourth-class)		700	
" "	(27 fees deposited in previous years) examination (Third-class)	433	
" "	(115 fees deposited in previous years) examination (Second-class)	60	
" "	examination (First-class)	35	
" "	examination (Supplementary previous to January 1st, 1920)	2	
" "	Provisional Certificate	19	
	5 at $1 00 previous to January 1st, 1920 2 at $5 00 (Fourth class) 8 at $5 00 (Third class) 4 at $5 00 (Second class)		
" "	renewal fees	8, 692	
	8, 369 at $1 00 323 at $5 00		
	8, 692 3, 533 Second class. 5, 159 Third class,		9, 941

Number of Hoisting Engineers' Certificates granted for the fiscal year ending October 31, 1920			1, 819
Candidates who qualified by examination		346	
" "	examination (fees deposited previous to fiscal year 1920)	81	
" "	examination (Supplementary)	1	
" "	Provisional Certificate	3	
" "	Renewal fee at $1.00	1, 360	
" "	Renewal fee at $5.00	28	
			1, 819

Number of stationary engineers' certificates refused		112
	13 Fourth class 75 Third class 21 Second class 3 First class 112	
Number of hoisting engineers' certificates refused		33
Total number of certificates refused during the fiscal year 1920		145

(Causes for refusal being low percentage in examination.)

During the fiscal year 1920 there was one Stationary Engineer's Certificate cancelled; one Stationary Engineer's Certificate suspended; and two Hoisting Engineer's Certificates suspended.

AMOUNT OF STATIONARY ENGINEERS' FEES

November, 1919	$ 544 00	
December, " (		
January, 1920 (		
February, " (	9, 620 27	
March, "	1, 144 15	
April, "	691 00	
May, "	795 35	
June, "	1, 025 15	
July, "	816 00	
August, "	719 25	
September, "	612 25	
October, "	1, 964 00	
	$17, 931 42	
Less Stationary engineers' Fees transferred to hoisting engineers' fees (see folio 497 No. 2 Stationary Engineers' Cash Book)	59 00	
	$17, 872 42	
Plus hoisting engineers' fees transferred to stationary engineers fees (see folio 497 Hoisting Engineers' Cash Book)	22 00	
Total		$17, 894 42

Amount of Hoisting Engineers' Fees deposited from November 1 1919, to October 31st, 1920:

November, 1919	654 00	
December, "		
January, 1920		
February, "	1, 047 00	
March, "	231 00	
April, "	159 00	
May, "	180 00	
June, "	167 00	
July, "	159 00	
August, "	112 00	
September, "	65 00	
October, "	182 00	
	$2, 956 00	
Less hoisting engineers' fees transferred to stationary engineer's fees (see folio 497 Hoisting Engineers' Cash Book)	22 00	
	$ 2, 934 00	
Plus stationary engineers' fees transferred to hoisting engineers' fees (see folio 497 Stationary Engineers' Cash Book)	59 00	
Total		$ 2, 993 00

Total amount of cash deposited as follows:

Hoisting Engineers, Fees	2, 993 00	
Stationary Engineers' Fees (including Plant owners' registration fees)	17, 894 42	
Grand Total		$20, 887 42

Number of stationary steam plants registered during fiscal year	586
Amount of fees received from plant owners for registration purposes	$586 00
Number of candidates examined by the Board of Examiners during the fiscal year, 1920	1, 865
Stationary (Fourth class)	731
Stationary (Third class)	548
Stationary (Second class)	86
Stationary (First class	3
Total Stationary	1, 404
Hoisting	461
Total	1, 865

INSPECTION OF FACTORIES, SHOPS AND OFFICE BUILDINGS.

Chief Inspector: JAMES T. BURKE,
Office: 46 Richmond Street West, Toronto.

INSPECTORS

R. ALBROUGH, 25 Grosvenor Ave., Sault Ste. Marie: Mr. Albrough's district is west, exclusive of North Bay, but including Sudbury, Manitoulin Island, to the United States and Manitoba boundaries.

W. T. E. BRENNAGH, 76 Lorne Ave., Hamilton: Mr. Brennagh's district is G.T.R. main lines west of London (Exclusive): east of Niagara Falls, south and east of London and Port Stanley lines; north to C.P.R. and G.T.R. to Drumbo, Crumlin and Tavistock (Milton, Branchton and Ingersoll Junction being excluded).

H. A. CLARK, 264 Crawford Street, Toronto: Mr. Clark's district is Toronto, east side of Yonge Street, to west side of Don River, north and south to city limits, including that portion of the Island.

W. S. FORSTER, 336 McLeod Street, Ottawa: Mr. Forster's district is east of North Bay, Algonquin Park and K. & P. Railway.

A. W. HOLMES, 39 Lakeview Ave., Toronto: Mr. Holmes' district is Toronto, east and south of Lansdowne Avenue and Bloor Street: west to Burlington, north to city limits; east, including York Street, University Avenue and Avenue Road: south to the Bay.

R. HUNGERFORD, 434 Shaw St., Toronto: Mr. Hungerford's district is Toronto, west of, but including Lansdowne Avenue and Bloor Street, also West Toronto, Lambton, Milton, Branchton, but excluding Drumbo, Stratford, Gowanstown and Fordwich, and including north to Southampton, Bruce Peninsula, Owen Sound, Collingwood, Meaford, Penetanguishene, and both C.P.R. and C.N.R. lines to Parry Sound, (inclusive); Orillia, Elmvale to Toronto: G.T.R. points being included.

S. J. MALLION, 74 St. Vincent Street, Stratford: Mr. Mallion's district is Fordwich, Gowanstown, Stratford, St. Mary's, London, St. Thomas and Port Stanley: south and west to border line, including Ingersoll Junction to the C.P.R. and north, including Teeswater, Kincardine, Goderich, etc.

H. STEVENSON, 60 Hambly Ave., Toronto: Mr. Stevenson's district is east of the Don River; north and south to the City limits, G.T.R. main line east to Kingston, C.N.R. inclusive.

H. J. TUTT, 39 Atlas Ave., Toronto: Mr. Tutt's district is west side of Yonge Street, exclusive of York Street, University Ave., and Avenue Road, north and south, including that portion of the Island. C.P.R. east to Sharbot Lake: G.T.R. North, excluding Orillia, but including North Bay and Abitibi Falls.

MRS. A. BROWN-REDDICK, 437 Crawford St., Toronto: City of Toronto, east side of Yonge Street, to Quebec boundary line: to Ottawa, Mattawa, North Bay, Sudbury, Palmerston, Owen Sound, Wiarton, Southampton, Shakespeare; north to the city limits to include West Toronto.

MISS J. OGILVIE, 8 Metcalfe St., St. Thomas: Port Dover, Simcoe, Woodstock, Tavistock, Listowel, Teeswater, west, south and north to Lakes Huron and Erie and River St. Clair.

Miss E. C.. Weaver, 26 Bernard Ave., Toronto: City of Toronto, west side of Yonge Street north to City limits.

During the past year total inspections numbered 13,812.

First inspections	8,613
Second inspections or re-visits	5,199

In addition to these inspections, visits were paid by the chemist to various factories for the purpose of testing the atmospheric conditions under which employees in certain trades were working.

Employees in the industries inspected, included:

TABLE NO. 1

Males Over 16 years	Males 14-16	Females Over 18 years	Females 14-18	Children Under 14	Total
189,7	2,694	72,644	8,547	281	203,926

Birth certificates were required and obtained for 365 employees of doubtful age.

Orders issued relating to the various requirements of the Act numbered 7,431.

PROSECUTIONS

Six prosecutions were instituted this year for violations of the Act. Convictions were secured in all cases and fines amounting to $280.00 were imposed.

Information was also laid against the parents of two boys. Both cases, however, were dismissed.

Charges were made under the following Sections.

Under	Section	24a	Employment of child labour	Fine $ 10
"	"	241	Employment of child labour	" $ 20
"	"	58	Relating to elevators	" $ 50
"	"	58 and 55	Elevators and failure to provide guards	" $100
"	"	34	Hours of labour	" $ 50
"	"	58	Elevato s	" $ 50

PERMITS.

There was a slight decrease in the number of applications for over-time permits issued as shown in table No.. 2.

Table No. 2.

Year	Sec. 34 Regular	Sec. 69	Sec. 70 Bakeshop	Total
1919	198	.....	71	274
1920	203	.....	47	250

One hundred and twenty-five permits were granted under Sec. 52, to contract clothing workers. These were personally delivered by the Inspector, and help in locating "out workers" was courteously extended by the firms.

COMPLAINTS

During the year 117 complaints were investigated, about 50% of which were upheld. Three were sustained in part only, and one did not come within our jurisdiction.

A number of these complaints were received through Trades Unions, and Associations; others from individuals, by letter or telephone; only two or three were anonymous.

All received prompt attention and were adjusted as far as possible.

SUBJECTS OF COMPLAINTS.

Table No. 3.

Heat	Elev.	Fire Protection	Child Labour	Ventilation	Sanitation	Hours of Labour	M	Total
12	8	5	20	12	18	15	27	117

ACCIDENTS.

Five thousand one hundred and eighty-five accidents were reported during this year, with 55 or 1.06% fatal: This is an increase in non-fatal, but not in fatal accidents, 4,029 being reported in 1919 with 57 or 1.41% fatal.

Fatalities were due:

To	machinery and its connections	9
"	elevators	9
"	falls	5
"	explosions, other main boiler	4
"	electricity	2
"	falling substances	5
"	trucking	1
"	engines and cars	5
"	suffocation	2
"	saws	2
"	crushed	1
"	burns	4
"	drowning	3
"	carbonic or gas poisining	1
"	struck by a buggy	1
"	operation necessitated by strain from lifting lumber	1

There were no boiler or vessel explosions under this Act this year.

Particulars of fatal accidents are herewith appended.

FATAL ACCIDENTS

Edward Molozhay, an employee of the Beaver Abitibi Timber Co. Ltd., Cochrane, was killed by being caught in shaft.

W. R. Staunton, employed by the Geo. A. Fuller Company, Port Arthur, was instantly killed when he fell into one of the grain tanks through a hole in the decking.

E. V. Elms, employed by the Ogilvie Flour Mills Co. Ltd., Fort William, was fatally injured by being caught and wound around shaft when putting conveyor belt on pulley.

The following fatalities occurred in the Algoma Steel Company's plant, Sault Ste. Marie:

Edgar Callwood, died from injurious received when an engine backing out of open hearth building struck him and he fell under drivers.

D. Trottier, was pulling rail off drill bed on to rolls, overbalanced himself, falling between car and wall with rail on top of him, which caused compound fracture of the skull from which he died.

J. Rondas was loading dirt box beside slag pot stand when locomotive came along and pushed box crushing him against slag pot stand and fatally injuring him.

Eugene Desarmo was drowned; while locomotive was standing on coal dock, he got down from cab to close ash pan door, and in returning, stumbled and fell into the water.

Elo Koteff, was killed by falling door which machine operator had replaced without oven being pushed. On signal, door was pushed onto luter with hot coke.

John Narynski, employed by Angus Shaw, Fort Frances, was fatally injured by fly back from split saw.

Magnus Hafdahl, an employee of the Shevlin-Clarke Co. Ltd., Fort Frances, was putting chain on the idler on edger skids when lumber lifter came down on him, crushing his side and causing fatal injuries.

Albert Johnson, employed by the Soo Falls Brewing Co. Ltd., Sault Ste. Marie, died from a fractured skull when a half barrel of beer fell on his head.

John L. Frost, employed by the Spanish Mills Co. Ltd., Cutler, died from injuries and drowning, following a fall from a lumber pile.

David Aubin, an employee of the Spanish River Pulp & Paper Mills, Ltd., Sault Ste.. Marie, started a repair job without closing down the machinery and was killed.

Pete Colonte, an employee of the Spanish River Pulp & Paper Mills, Ltd., Espanola, was fatally injured by being pinned against wall when switch engine coupled on to car, as he was attempting to pass between draw bar of coal car and wall of boiler house.

Howard Scharf, an employee of the Spanish River Pulp & Paper Mills, Ltd., Sturgeon Falls, died from injuries received while standing directly behind motor pully, watching men putting belt on pulley.

Ernest Coombe, an employee of the American Cyanamid Company, Niagara, Falls, slipped on some loose coke, dislodging guard plate allowing foot to go into opening: leg had to be amputated and he died.

Walter Neff, employee of the Canada Cement Company, Ltd., Port Colborne, died from burns received from explosion of powdered fuel when same came in contact with floor.

E. D. Fairbrother, employed by the Canadian Carbonate Limited, Hamilton, died from injuries received when boiler slipped off the jack pinning him to the ground when he was moving some wood packing from underneath.

William Wright, employed by the Canadian Westinghouse Co. Ltd., Hamilton, was instantly killed when attempting to replace table in position with motor on machine still running: but operating lever in neutral.

John Makowetsky, employed by the Dominion Foundries & Steel Ltd., Hamilton, was struck by a casting when truck of castings was jarred while putting block under wheels of truck and died from a fractured skull.

Gus Mizoresk, an employee of the Grant's Spring Brewery Co. Ltd., Hamilton, died from carbonic gas poisoning.

R. Spall, an employee of the National Steel Car Co. Ltd., Hamilton, was crushed through abdomen and died when steel fell on him from crane while he was removing chains from the steel.

John Bozak, an employee of the Page Hersey Iron Tube & Lead Co., Welland, died from burns and shock; while watching iron pot containing material for tempering dies,, some of the compound flew out of pot striking him in face and upper part of body.

George Homer Waffle, an employee of the Simcoe Wool Stock Company, Simcoe, was fatally injured when caught in gears.

George Eden, employed by the Stanley Steel Co. Ltd., Hamilton, died from severe burns received when his clothes caught on fire on opening door of stove used on mill floor.

Frank Cristoli, an employee of the Steel Company of Canada, Ltd., Hamilton, was fatally injured when struck by a buggy.

James Killen, an employee of the Steel Co. of Canada, Ltd., Hamilton, died from multiple injuries to abdomen and legs when engine turned over; driver in engine locked causing wheel to skid and ran into another train.

John Dick, an employee of the Evening Telegram, Toronto, was killed instantly by an explosion of heating unit connected to drying table in stereotyping process.

Gilbert Jones, an employee of the Hambly & Wilson Co. Ltd., Toronto, was struck on head by descending elevator when he raised the safety gate and apparently looked down towards another floor.

Arthur Bourne, an employee of the O'Keefe Brewery Co., Toronto, was killed when struck on either the head or neck by the counterweight on the elevator; while helping electrician to do some work., he crossed over at the top of the elevator shaft where no one was supposed to go.

Jos. Sauve, employed by the Hawkesbury Lumber Co. Ltd., Hawkesbury, was fatally injured in chest, ribs and head, when smock caught in revolving shaft.

Ed. Berthiaume, employed by the Hawkesbury, Lumber Co. Ltd., Hawkesbury, fell and broke his leg; complications resulted in death.

T. Mastersau, employed by the Dominion Shipbuilding and Repair Co. Ltd., Toronto, while going up gang plank fell between boat and dock and was drowned.

Richard Gower, employed by the Steel and Radiation, Ltd., Toronto, was lifting some lumber in carpenter shop which may have caused strain; was operated upon and died.

Clem R. Frank, an employee of the Crown Furniture Ltd., Preston, was fatally injured by a fall from a roof.

John Cain, an employee of the Dodge Mfg. Co. Ltd., Toronto, was fatally injured by fall of elevator.

Oscar Marchane, an employee of the Doon Twines, Ltd., Kitchener, was fatally burned on legs, body and arms; while poking fire under boiler, a spark flew out and ignited his clothing.

John McLean, employed by the Goldie & McCulloch Co. Ltd., Galt, died from injuries sustained when struck in pit of stomach with water from boiler head causing a hemorrhage into the abdomen.

Chas. Fitter, an employee of the Hepworth Mfg. Co. Ltd., Hepworth, was instantly killed when elevator fell on him while he was helping to adjust same.

Wm. Madill, an employee of the Kolapore Saw Mill Co., Kolapore, was tail sawing when he allowed a board to fall on saw where he held it until he, with the board was carried right over the saw, and cut in two.

Mathew Caruana, an employee of the Swift Canadian Co. Ltd., Toronto, was electrocuted; while standing on short stool putting fuse in power panel box, his hand slipped and came in contact with live terminal, and he received a shock of 550 volts.

Alexander Taylor, employed by C. E. Whicher of Colpoy's Bay, died from internal injuries caused by a board striking him.

George Henry Holmes, employed by the Willys-Overland, Ltd., Toronto, was fatally burned by an explosion in enamelling room.

Neil Walker, an employee of the Haldimand Flax Co., Cayuga, received internal injuries which resulted in death; was found between belt and main pulley of engine.

Wm. Rockey, an employee of the Stratford Chair Company, Stratford, was killed while operating the sticker, when the guide bar was thrown backward, striking him in the stomach.

Albert O. Miller, an employee of the Tanton's Storage, London, while operating elevator in warehouse, was jammed between the upper floor and the elevator and killed.

Leonard Goodwin, employed by the Wilson Canadian Co. Ltd., Chatham, was scalded when he fell in catch basin.

John McGillivray, an employee of the Canada Boxboard Co. Ltd., Frankford, sustained flesh wounds, and muscles of arm and side torn loose exposing arteries and veins, died of shock. Supposed he got caught in gearing of press in machine room and was forced under the guard.

Louis Bardy, an employee of the Canada Cement Co. Ltd., Deseronto, sustained a fracture at base of skull and died; while helping to move steel rail, he lost his balance and fell from top of concrete wall.

Alexander Reid, an employee of the Canadian Industrial Alcohol Co. Ltd., Corbyville, was instantly killed from fall down elevator shaft.

Wm. Slocombe, employed by the Olympic Powder Works, Deseronto, was killed by an explosion.

Johnston Graham, an employee of the Point Anne Quarries Ltd., Point Anne, was suffocated when he fell into a screenings bin.

Chas. Holland, an employee of the Bonner-Worth Mills Peterboro, was fatally injured when caught between floor of elevator and arch of basement aperture.

Gilbert Jones, an employee of the Hambly and Wilson Co. Ltd., Toronto, was struck by descending elevator and killed; supposed he inserted head through the opening in gate used to reach operating rope.

Frederick Oliver, employed by Wm. Wrigley Co. Ltd., Toronto, was fatally injured by accident on elevator.

BOILER INSPECTION

Chief Inspectior: D. M. Medcalf

Office; Spadina Crescent. Toronto.

Inspectors: H. Brown, F. Swarbrick, J. A. Findlay, W. Burns, T. J. Main, J. R. Dey.

Drawings and Specifications Surveyed and Registered

Boilers, H. R. T.	8	designs	$5 00 per design	$40 00
Boilers	16	"	10 00 " "	160 00
" Locomotive	19	"	10 00 " "	190 00
" Water tube	11	"	10 00 " "	110 00
" Vertical	21	"	5 00 " "	105 0
" "	2	"	10 00 " "	20 00
" Heating	5	"	10 00 " "	50 00
" "	4	"	5 00 " "	20 00
" Gas-fired	2	"	5 00 " "	10 00
" Firebox	4	"	10 00 " "	40 00
" Scotch Dry-back	2	"	10 00 " "	20 00
" drums	1	"	10 00 " "	10 00
Digestors	4	"	10 00 " "	40 00
Digestor	1	"	5 00 " "	5 00
Generator	1	"	5 00 " "	5 00
Generator	1	"	10 00 " "	10 00
Grease Distiller	1	"	5 00 " "	5 00
Mud gun	1	"	5 00 " "	5 00
Economizers	2	"	10 00 " "	20 00
Fertilizer dryers	2	"	5 00 " "	10 00
Air receivers	10	"	5 00 " "	50 00
Vulcanizers	14	"	5 00 " "	70 00
Kettles	6	"	5 00 " "	30 00
Cylinder	1	"	5 00 " "	5 00
Tanks	41	"	5 00 " "	205 00
Oil heater	1	"	5 00 " "	5 00
Fittings	23	"	3 00 " "	69 00
Piping Plans	39	"	5 00 " "	195 00
" "	7	"	7 50 " "	2 50
" "	5	"	10 00 " "	50 00
Revisions	1	"	1 00 " "	1 00
"	1	"	5 00 " "	5 00
"	1	"	N -C	
Exchange on cheque				15
Total	258	Designs		$1612 65

NUMBER OF NEW PRESSURE VESSELS INSPECTED

Ontario	595	inspections	$5 00 per inspection	$2975 00
Great Britain	9	"	" "	47 34
United States	29	"	$5 00 " "	145 00
British Columbia	14	"	$10 00 " "	140 00
Total	647	inspections		$3, 307 34

NUMBER OF PRESSURE VESSELS REPAIRED, SOLD OR EXCHANGED

Number of used boilers inspected	950	$5 00 per inspection		$4, 750 00
" " " " scrapped	9	5 00 " "		45 00
" " " " condemned	5	5 00 " "		25 00
" " cast iron boilers inspected	1	5 00 " "		5 00
" " used tanks inspected	30	5 00 " "		150 00
" " " air receivers inspected	5	5 00 " "		25 00
" " " pipe lines inspected	6	5 00 " "		30 00
" " steam mangles inspected	3	5 00 " "		15 00
" " brick dryers inspected	2	5 00 " "		10 00
" " tractors inspected	1	5 00 " "		5 00
" " incinerators inspected	1	5 00 " "		5 00
" " safety valves renewed	1	3 00 " "		3 00
Total number of inspections	1, 014			$—5, 068 00

This is not a complete record of all inspections made by our inspectors, because on many occasions they have to make two or three inspections but only collect the fee on the first visit. For work on second-hand pressure vessels the travelling expenses are collected on each trip made.

MISCELLANEOUS

Class "A" certificates issued	619
Class "B" certificates issued	779
Class "C" certificates issued	265
Class "D" certificates issued	93
Letters—Inwards	4,449
Letters—Outwards	5,177
Wires—Inwards	122
Wires—Outwards	101

REVENUE STATEMENT.

Dr.		Cr.	
Fees for designs surveyed	$1 612 65	Amount of monies transmitted to Treasury Department through Department of Labour	15 467 60
" " new pressure vessels	3 307 34		
" " used pressure vessels	5 086 00		
" " heating boilers at $1.00 each	320 00	Amount of monies received direct by Treasury Department	127 10
" " pressure vessels at $1.00 each	102 00		
Travelling expenses	4 999 41	Balance outstanding at year ending, 31st October, 1920	8 50
Balance outstanding at end of year, October, 1919	85 50		
Readjustments to balance	14 00		
Amount of monies written off Cash Ledger	94 00		
	$15, 603 20		$15, 603, 20

Amount of monies transmitted to Treasury Department for year ending 1920	$15, 594, 70
Amount of monies transmitted to Treasury Department for year ending 1919	$11, 320, 55
Increase	$4 ,274, 15

REPORT

OF THE

Minister of Education

Province of Ontario

FOR THE YEAR

1920

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
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1921

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REPORT

OF THE

MINISTER OF EDUCATION

FOR THE YEAR 1920

To His Honour,

Lionel H. Clarke, Esq.,

Lieutenant Governor of the Province of Ontario.

Your Honour,—I have the honour to present the annual report of the Department of Education for the year 1920.

During the past year the school system, and education generally, has aroused widespread interest. Many meetings have taken place both in the rural parts and in urban centres. In former times a few phases of education usually absorbed attention. The efficiency of the whole system is now under review, and there is a common desire to amend what is amiss. The discussions are not of a party or political kind. The deliberate judgment of the people, rather than a passion for hasty decision, is being brought to bear, and this is satisfactory from all points of view. It is essential, if real progress is to be made, that the trustees, the teachers, and the Department should work together. The control of the system being largely local and partly central has led, by a process of evolution, to a condition which demands an alert popular intelligence. The steps taken by Ontario in developing the original structure designed by the founder, Dr. Ryerson, have tended to co-ordinate the various parts without destroying the division of authority between the Legislature and the school boards. Whatever changes the future may have in store, it is improbable that this principle, which rests at the root of our system, will be abandoned. When the Legislature, upon the advice of Dr. Ryerson, created a Minister of Education, it decided that the final source of power must be the elected representatives of all the people. Important as this decision was, when compulsory elementary education was seen to be vital to the welfare of the Province, it is doubly important now that the age for compulsory schooling, either in whole or in part, has been advanced to eighteen years. As this policy steadily develops, the duty of the Legislature in maintaining unity of aim and purpose, and in supplying the necessary support so that the rate of progress may be general and not confined to the wealthier portions of the Province, will become clearer. The right of all young people in Ontario, whether they live in town or country, to equality of opportunity in education will always be best asserted by legislative action. To be effective, such action must be based upon public opinion. It will be a reasoned opinion, or it will not prevail. Ample scope is left for leadership, but those who lead will be governed by the strongest moral, social, economic and political

forces. Democratic, not arbitrary, control is the hope of education, since any plan imposed upon the community will in due time lose its vitality. Whether expressed in these terms or not, the attitude of Ontario toward education during 1920 has been plainly inspired by these considerations.

Aid to Universities

The problems to which the Department has addressed itself during 1920 included the financial aid to universities, the support of elementary schools, especially rural schools, the system of inspection, the condition of the secondary schools, including their financial basis, and the encouragement of medical and dental inspection, agricultural instruction and certain other phases of the school programmes. The question of university aid has lacked, for some years, a definite plan. On assuming the office of Minister I found that the Provincial University, which has the prior claim to state support, had been curtailed in its revenues by a departure from the agreement reached in 1906 under the Government of Sir James Whitney. This agreement, which was embodied in a statute by the Legislature, had taken account of the previous engagements entered into by the Province in 1884 whereby other universities, such as Victoria and Trinity, and such colleges as Knox, Wycliffe and St. Michael's, had been induced to enter into a consolidation or federation. This arrangement was intended to avert over-expenditure upon higher education. It entailed, as a condition, an adequate support of the Provincial University, which was to do work common to all the institutions concerned. Two of the universities, in consequence, temporarily yielded their power to grant degrees. The Act of 1906 still further cemented the union and made provision for its permanency. When the promised revenues were cut down, as already stated, the central institution in carrying out a policy sanctioned by the Legislature began to show deficits. These deficits were met by annual votes of the House. This plan was open to many objections. It did not impress me as either businesslike or beneficial. Another obligation had, meanwhile, developed and has been assumed by the Legislature. This was the claim of Queen's and Western Universities to public aid for the facilities which they afforded to the eastern and western sections of the Province in the work of higher education. It was found impossible, with the information at disposal, to determine justly and wisely what course should be pursued to meet the situation. To deal with it lay beyond the ordinary function of the Department, which, as an organization, does not control the university part of our system. The Government decided to appoint a Royal Commission of inquiry with Hon. H. J. Cody, formerly Minister of Education, as Chairman, and to associate with him the following gentlemen: Sir John Willison, Messrs. T. A. Russell, J. Alex. Wallace, C. R. Somerville and A. P. Deroche. The Commission has performed the important labours entrusted to it with zeal, intelligence and intimate knowledge of the various problems involved. The report of the Commission has already been presented to your Honour and made public. It has been received with general approval. I commend its decisions to the best judgment of the Province and of the Legislature and take this opportunity of thanking the members of the Commission for the excellent work they have done.

The Elementary Schools

The outstanding facts in relation to elementary schools are encouraging. There is an increase in their number. The average daily attendance of pupils is much better. The salaries of teachers are higher. The statistics available are for

the calendar year 1919, but partial returns for 1920 confirm the progressive movement in all these respects. The number of elementary schools was 6,738, and the average attendance 357,997 with a larger number of pupils enrolled. The total value of school buildings, sites and equipment, is about $52,000,000. The increase is considerable as compared with previous years. The salaries of teachers in 1919 showed steady advances, although not in proportion to the requirements of the situation. For many years the teaching profession has been underpaid and the effect has been twofold: to deplete the ranks of men teachers (they are now less than 10 per cent. of the whole), and to give small inducement to women teachers to remain. The effect upon the schools has been injurious from both causes. A good supply of young inexperienced teachers, however bright and well-trained they are, does not give the results desired. As has been said so often, the teacher is the school. To modify the course, to provide better buildings, to create a wider unit of administration are all excellent lines of advancement. The fundamental problem is the quality and experience of the teacher. To hold the best teachers in the schools, by making the profession attractive for men as a life's vocation and for women until marriage withdraws them, is the first step toward the re-vitalization of elementary education. While the salary paid is not the sole factor with a profession so unselfish as the teachers, it is undoubtedly a strong influence in shaping the careers of young men and women. With this object in view and guided by the experience of other communities similar to ours, both at home and abroad, the policy of the Department has been to lend strong support to a higher salary scale. The outlook at the beginning of 1920 rendered this policy imperative. It was decided to meet the emergency by increasing the township grants for salaries (making clear the power of those municipal bodies to pay more if they so desired) and to distribute the legislative grants to rural schools so as to induce boards to pay the highest salaries compatible with their resources. The legislative grant to elementary schools was accordingly made higher than in any previous year. In 1918 the amount was $970,585, in 1919 it was $1,316,529, and for 1920 the Legislature generously voted $1,535,000. The result was satisfactory, in that the average salary for both urban and rural schools which was for male teachers $1,226 in 1918, increased to $1,348 in 1919, while the scale for women teachers increased in the same year from $707 to $817. The urban salaries, always higher than the rural, bring the average up. The rural salary in 1919 for women teachers, who form the vast majority, was but an average of $663, which was too low. It became necessary, therefore, to bring the new policy to bear upon the rural schools.

Increase in Salaries

The effect, incomplete as are the statistics for 1920, has been a remarkable increase of salaries in rural and the smaller urban schools. Many inspectors have made special reports to indicate in a general way the situation when the schools opened in September, 1920. The particulars are instructive:

Inspector.	Inspectorate.	Increase.
Richard Lees	Peterborough E.	About 25 per cent.
Jas. Colling	Hastings N.	15 "
J. A. Taylor	Elgin W.	$75 to $375.
I. D. Breuls	Renfrew N.	33 per cent.
W. J. Galbraith	Peel	$254 average
T. W. Standing	Brant and Norfolk (in part)	$193 "
Robert Boyes	Northumberland and Durham, No. 3	$250 "

Inspector.	Inspectorate.	Increase.
A. L. Campbell	York West	30 per cent.
James F. McGuire	Leeds and Grenville, No. 1	35 "
J. W. Hagan	Manitoulin, Algoma and Sudbury (in part)	$250 average.
W. H. G. Colles	Kent East	56½ per cent.
F. W. Sheppard	Waterloo N.	32 "
G. G. McNab	Renfrew S.	$210 average
J. W. Odell	Northumberland and Durham, No. 2	33⅓ to 60 per cent.
Wm. Irwin	Perth N.	25 per cent.
Lambert Norman	Waterloo S.	31 "
Henry Conn	Lambton W.	20 "
James McNiece	Welland S.	41 "
J. L. Garvin	Simcoe N.	60 "
J. M. Cole	Oxford N.	30 "
R. A. Paterson	Oxford S.	32 "
W. R. Liddy	Dufferin	53 "
E. E. Snider	Northumberland and Durham No. 1	35 "
M. R. Reid	Frontenac N. and Addington	34 "
P. J. Thompson	Middlesex East	$185 average
J. H. Smith	Perth S.	25 per cent.
N. McDougall	Lambton E.	$200 average
J. W. Marshall	Welland N.	27 per cent.
Geo. A. Carefoot	Lincoln	25 "
Isaac Day	Simcoe E.	25 "
Robert Wright	Grey S.	30 "
John Ritchie	Thunder Bay	25 "
J. C. Smith	Elgin E.	13 "
W. C. Dowsley	Leeds and Grenville, No. 2	30 "
F. P. Smith	Prince Edward	28 "
J. L. Moore	Parry Sound	44 "
W. F. Bald	Bruce W.	$100 to $300
S. A. Truscott	Frontenac S.	33 per cent.
D. M. Christie	Sudbury (in part) and N. Nipissing	37 "
H. B. Fetterly	Dundas	35 "
P. W. Brown	Timiskaming and Nipissing (in part)	33 "
W. A. Wilson	Timiskaming N. and Algoma N.	30 "
H. F. Cook	Norfolk	$200
J. W. Crewson	Glengarry	34 per cent.

The increases in salaries during the last school year amounted, apparently, to a general increase of from 30 to 35 per cent. In some cases the increases are much greater in the salaries of rural school teachers. The effect of these increases will, no doubt, be to increase the number of fully qualified teachers throughout the Province and to make the position of the teacher more permanent. An additional increase amounting possibly to not less than 20 per cent. may be looked for during the coming year. About 40 per cent. of the inspectors report that there is less moving from school to school than formerly. About 20 per cent. do not think conditions have greatly changed. The remaining 40 per cent. are not yet in a position to give a decisive opinion.

The Influence of Example

On this question of salaries, it is well worth while to note the views now being expressed in the United States. Mr. Claxton, Chief of the Bureau of Education, at Washington, declared in an address to the National Education Association:

"The average wealth production of the adult worker of the United States is not far from $1,250 a year—probably somewhat more. The average for

men and women of ability, preparation, and industry of such teachers as we are talking about, cannot be less than $2,000; it is probably nearer $3,000, $4,000 or $5,000. But in view of the fact that teaching is by its very nature an altruistic calling, and also because it may reasonably be supposed that the purchasing power of the dollar will increase considerably within the next few years and the cost of living as measured in dollars relatively decrease, let us agree on $2,000 as an average salary for teachers in the elementary and secondary schools of the United States. This is three times as much as the average for the year 1917-18 and more than 150 per cent. above the average for the year 1919-20.

"If the pay to beginners is so fixed that the average for all teachers in the first year in urban and rural elementary schools and high schools is $1,200 this will allow other salaries of $2,500, $3,000, $3,500 and $4,000. Salaries of $5,000 or more may be held out as rare prizes for those who have gained experience and have proven their worth and who are willing and able to pay the price of such great and fine service as is recognized by unusual rewards in other professions."

It will be said, correctly enough, that conditions in Ontario and in the United States are not identical. But they are, in a general way, similar, and we would fall into error if we ignored their experience, educational experiments, and attitude. Two other observations of Mr. Claxton call for serious consideration, because they are of universal application. They sum up the situation with which the people of Ontario have to deal:

"Our power to produce and to pay will and must depend on the health, knowledge, skill, purpose, and will of the people; that is, on their education. How much can we afford to pay for education? Since education is a factor which cannot be eliminated from the wealth-producing power of the people and since all wealth depends on education, we can as a people afford to increase our appropriations for education until the increase in cost becomes greater than the increase in the productive power which comes through education. No people have ever yet found the limit.

"Will the people pay? The wealth is theirs, the children are theirs, the schools are their agents, owned and supported by them for the education of their children and for the attainment of all that this means and can be made to mean for their own happiness, for the individual welfare of their children, for the production of material wealth, for the individual and common good, for the public welfare, for civic righteousness and social purity, for strength and safety of state and nation, and for all that patriotism means and all that supports life and makes life worth living. I have faith to believe that when the people are made to understand this they will respond. They have never failed. They will not fail now."

Ontario's Attitude

The people of Ontario have already made great sacrifices for education. They are in no wise open to the charge of lagging behind the van of progress. The urban centres, with their greater concentration of population and tax-paying facilities, impress the eye more favourably with fine buildings and playgrounds. But the rural boards have invested largely in school expenditures. The value of rural school buildings, sites and equipment is about $15,000,000. To support the rural schools, the localities tax themselves to an extent that is not always kept in mind. Either in the form of township grants, or by taxes raised by the school

sections, the rural trustees spent $6,685,766 in 1919. The total amount expended upon elementary education in 1919, both urban and rural, by the people themselves was $18,851,627. This, of course, is exclusive of the cost of technical, high school and university education. The amount is expended by trustee boards, emanating from the tax-payers, and a true reflex of popular regard for the duty of education. It would be a mistake to indulge in any boasting about Ontario's zeal in the training of her people, at a time when so much remains to be done and when so many complex problems perplex the best exponents of education, but anyone who supposes that the Province is apathetic and prone to look upon the cost alone has failed to examine the facts of the situation which are readily accessible to all. It is, therefore, a satisfaction to feel that when Mr. Drury, the head of the present administration announced that a penurious policy in education was not the aim to be kept in view, but that we must look to more, not to less, expenditures upon the schools, he expressed with absolute accuracy the wishes and intentions of the parents of pupils. It is true that value must be got for the money and that on this point differences of opinion will develop. This is by no means undesirable. The more discussions we have, conducted in a constructive spirit and not mere carping, the better the results. No one individual, and no group of individuals, can know all that must be done in education during a period when economic, moral and social questions of a far-reaching kind engross the thoughts of thinking men and women. By co-operation and by a readiness to adapt and apply the advice of the best minds we shall make permanent advances.

Consolidation of Schools

No complaint can fairly be made of the progress of consolidation. Under the law of 1919 there have been formed ten consolidated schools. These are situated at Stratton, Dorion, Tarentorus, Stamford, Barwick, Mindemoya, Benmiller, Wellington, Savard and Etobicoke. The law is not compulsory, but permissive. It proceeds upon the principle that the local units are to be convinced, not constrained. A great campaign of debate has taken place throughout the Province upon the subject. More than two hundred meetings have been held. The Department has sent its own officers to conferences and meetings as far as their regular duties allowed. They have been ably assisted by the county inspectors, whose special knowledge of each locality has been invaluable. The Trustee Association, largely composed of rural trustees, has lent its best efforts to aid in organizing the movement in those parts of Ontario where it is manifestly the best remedy for educational inefficiency. In this connection the services of Rev. Mr. Morris and Rev. Mr. Wilson have been especially useful, and the help of the organization as a whole, owing to its representative character and its freedom from strictly official inspiration, has been in the direction of making the discussions a perfectly free debate. A coercive policy would not, in my judgment, hasten consolidation in a beneficial way. There are localities, fully known only to those who reside in them, where consolidation could not be worked at the present time. Time must be given for adequate consideration. This may seem a slow method of reorganization, but it is the one best adapted to the conditions existing in Ontario. There are everywhere at least two deterrent influences which affect consolidation of schools. Generous as are the financial inducements offered by the Legislature, the consolidated school cannot be put forward as a cheap kind of school. It is not a device for saving money. Its aim is to provide a better kind of school where country boys and girls may receive advanced education which the isolated school, staffed as it is, cannot

give. Secondly, the combining units merge their separate interests for all time in the new school. In other words the various sections lose their identity. The former law to encourage consolidated schools contemplated union for a term of years and usually led, when tried, to withdrawals at the end of the period. The reluctance of school sections to permanent effacement is natural. From the standpoint of the educational structure, Ontario is an old province. Some of the school sections date back more than two generations, and there are cases where memorials exist in honour of the pioneers who first settled the area and who developed its agricultural, social and educational activities together. Such traditions are not lightly parted with and are moreover linked to the desire for self-government, which is the genius of our institutions. The school section, if not the oldest, is the unit of administration which is closest to the people and those who compose it desire to know exactly what the substitute is before they abandon the present system. Their hesitation is, therefore, honourable to them and is in no sense due to sluggish neglect of school improvement. That the one-roomed ungraded school has in most cases ceased to fulfil its purpose is generally recognized, and wherever consolidation is practicable and the real remedy for the present situation, I am confident it will be adopted. Where physical and other conditions are the bar to union, another measure for centralized advanced instruction must be devised and carried out. A reform of this kind, which depends for success upon the cordial support of the people affected, cannot be imposed upon the rural population without their acquiescence, nor can it safely proceed from some abstract theory that, as the good of the state calls for compulsory education, a system that was useful in its day may be uprooted with impunity. The policy of consolidated schools is so good in itself and so well designed for many rural areas that any delay in its adoption will not be long.

The System of Inspection

The inspection of schools, like some other parts of the school system, has been the product of circumstances. The power of appointment, the qualifications prescribed for the holders of the office, and the scale of remuneration, have all been determined by various considerations at different periods. Some hold office directly from the Crown, as in the cases of the inspectors of high schools, continuation schools, district schools and separate schools. Some are appointed by the county councils and some by urban boards. The salary schedule has been affected to a considerable degree by the diversity of appointment, and in the cases of county inspectors is borne partly by the Legislature and partly by the county authorities. All inspectors, by whomsoever appointed, are governed by regulation. As a body the inspectors, like the teachers, have been overworked and underpaid. There is a well-grounded belief that the qualifications, academic and professional, call for revision, and that the county inspectors should be paid by one authority and not as at present, by two. The observations upon these and upon other points made by Dr. Waugh, the Chief Inspector, in his annual report, are worthy of close consideration, and illustrate the contention that the time has come for such modifications of existing regulations as may tend to make the office of inspector more attractive to the very best teachers and provide more time for the educational work, which should be a first charge upon the office. One change has been made during the year which should bring relief. The inspectors have complained, not unreasonably, that the demand upon their time for purely clerical and statistical returns has increased greatly with the years. The departmental returns, upon which the distribution of the legislative grants is based, call for information which

the inspectors supply. The superannuation of teachers whose contributions are withheld from the grants entails a set of returns that are affected by all changes of staff and of salary. A new system has been devised by which the labours of the inspectors for these purposes will be sensibly lightened. The work must be done by someone, and much, if not all, of the arithmetical calculations involved have been transferred to the Departmental staff. Efforts will be made to have this duty performed in part by temporary employees, so as to make no permanent addition to the regular staff.

Industrial and Technical Education

The extension of vocational training in the province proceeds apace. The work carried on in day and evening schools in industrial, technical and art classes, reveals satisfactory results as to attendance and the interest taken in the subject by the communities concerned. The report of Dr. Merchant, Director of Industrial and Technical Education, indicates a healthy condition of affairs. The day schools contain 4,790 pupils and the number of pupils on the roll of evening classes exceeds 26,000. The extension of this kind of instruction has been limited, in the past, as the Director points out, by the lack of buildings and equipment, and this difficulty is now being removed by aid from the funds voted by the Province and by the Federal Parliament. The plan of distribution is based upon an agreement with each municipality by the terms of which the local authority pledges itself to utilize the accommodation provided to its fullest capacity and provide suitable management, staff and equipment. Of the Federal money about $225,000 has already been paid over. The new plan has stimulated building, and as localities determine their needs for this class of school the money for building is available. How to determine the requirements of each locality is exemplified in the case of Peterborough, where the officials of the Department, at the request of the city, have made a survey of the whole situation, and thus furnished the necessary information. The report of this survey should be read by all who desire to know the method of arriving at a definite idea of what should be done. The staff of the Department devoted to this branch of education has been fully occupied during the year and their services are available for all places. The organization of the classes for girls and women in home-making and occupations especially suited to women, has been put in charge of Miss McKim, whose experience and training fit her for the work. Miss McKim began her duties in September last, and has already visited most of the schools, assisting principals and teachers in organization and methods of instruction.

The Adolescent Act

The accommodation that will have to be provided for pupils between the ages of fourteen and sixteen has been a subject of deep interest to urban centres, since that section of the Act was proclaimed to come into force on September 1st, 1921. It may be well to quote the words of Dr. Merchant on this point:

School Boards are particularly interested at the present time in obtaining information regarding the number of pupils for whom full-time and part-time instruction must be provided under section 3 of The Adolescent School Attendance Act. Calculations have been made from actuarial tables and the returns of the Dominion census, and the results have been carefully compared with the information obtained in the surveys made by the officers of the Department. The general conclusion is that adolescents between fourteen and sixteen years of age

constitute about 3.5 per cent. of the population in urban centres, and that of the total number of adolescents within these age limits from fifty to sixty per cent. are already in attendance at school. While the numbers may vary in different municipalities, the figures are sufficiently accurate to give boards a fair idea of the number of pupils to be provided for under a strict enforcement of the Act.

The Secondary Schools

Two considerations of much importance arise out of the present situation in respect to the secondary schools. One is the financial support of these schools, and the other relates to their educational efficiency. In point of number and of attendance the secondary schools are prosperous. The high schools and collegiate institutes number 167 with an enrolled attendance of 33,036 pupils, while the continuation schools number 137 with the enrolled attendance 5,126. The increased grants of 1920 have greatly relieved the financial position of the continuation schools, although the difficulty of securing qualified teachers, even at somewhat advanced salaries, is severely felt. The total cost of maintaining the secondary schools in 1919 was $3,136,743. Of this sum $2,748,042 goes to the support of the high schools and collegiate institutes. In many cases, especially the high schools that admit county pupils and are partly dependent on county support, the financial condition is not satisfactory. During the war little building was attempted and the increased attendance, together with the necessity of providing facilities which stood over till the war should close, has brought high school boards face to face with an expenditure of considerable magnitude. The reports of the high school inspectors confirm the representations made by an influential deputation of trustees to the Government during the sitting of the Legislature in 1920. The higher salaries that must be paid and the larger attendance call for increased revenue for maintenance. This situation may be partly met by increasing the legislative grant which will automatically increase the county grant by a similar amount, and also by raising the rates paid by the counties for county pupils. It does not, however, dispose of the question of the capital expenditures which will be entailed by the erection of new buildings. This problem does not press in a few large and wealthy cities, but to many high school centres it is a serious matter for which some solution must be found.

A word may be said as to salaries of secondary school teachers. These salaries have never been adequate, although they have appeared to be so in comparison with those paid to the teachers in elementary schools. The fact that the proportion of male teachers has dropped to 48.63 per cent., although a number of men on war service returned to the profession in 1919, tells the tale. No English-speaking community anywhere has a more talented and scholarly body of men and women that Ontario has in its high school teachers. The expense of their education and the fact that they must look to their profession for permanent careers point to the wisdom as well as the justice of maintaining a generous salary scale. Otherwise it is certain that the high school staffs will be drained of their best material. An inquiry has been made under the auspices of the Department to explain why so many teachers in secondary schools who were employed during 1919-20 are not there now. Some withdrew from perfectly natural causes, such as marriage in the case of women teachers, but there remains the significant fact that 181 members of the staffs of 1919-20 are not teaching now.

The second consideration of consequence affecting secondary schools is the work of the competent and representative committee on the courses of study which has been sitting at intervals during the past six months. The labours of this

committee will probably have a profound influence on the future of secondary education. Its members have had under review many phases of high school work. Three in particular may be mentioned: (1) The effect on the schools of preparing pupils for matriculation and for the teaching profession, (2) the division between elementary and secondary school courses, and (3) the larger number of subjects in demand by different types of pupil. Not the least interesting problem is the need arising out of the Adolescent Act for pupils who, not going forward to the universities or the profession, desire a general education to fit them for their future life in the community. The committee has not reached its conclusions, but has drawn up an interim report which will be made public at once.

The Supply of Teachers

The attendance in the training schools of candidates for the teaching profession at present gives ground for no immediate anxiety as to future supply. There are 70 students in the Ontario College of Education who desire to qualify as high school assistants, and 15 taking the household science course, a total of 85. In the seven Normal Schools there are 125 candidates for first class certificates and 1,162 for second class certificates. If the successful candidates all take schools, the annual loss occasioned by such causes as death, withdrawal to other occupations, marriage and removal from the province, should be made good in fair measure. There are now 13,389 teachers in the elementary schools and 1,639 in the secondary schools. The number of teachers with temporary certificates reported to the Department as in force at the beginning of 1921 was 305. Some of these had partial professional training and all were recommended by the inspectors as being the best qualified who were obtainable for certain schools. This indicates a healthy condition of affairs throughout the Province. There was in 1919 a small increase, 260, in the number of male teachers. The number of returned soldiers who trained for the profession and qualified in 1919-20 was 253; of these 134 are in charge of schools. The others apparently were unable to secure positions at adequate salaries, or found other suitable employment. This illustrates the relation which the amount of salary bears to the number of male teachers. It is idle to lament the gradual decline in the supply of men for the schools, when the salaries are not made high enough to attract them. There is no mystery about the movement of men away from the teaching profession. Ontario compares favourably with all other English-speaking communities since the war in being able to command the services of duly certificated teachers. But undue optimism serves no good purpose in this respect unless trustees see the situation as a whole and deal with it. The issue is one that will always be largely in their hands.

The various reports of the officials of the Department, including the reports of the Schools for the Blind and for the Deaf, the report of the Inspector of Public and Separate Schools, the report of the Director of Professional Training, and other reports are appended hereto.

Respectfully submitted,

R. H. Grant,

Minister of Education.

Toronto, March, 1921.

APPENDIX A

REPORT OF THE CHIEF INSPECTOR OF PUBLIC AND SEPARATE SCHOOLS

To the Honourable R. H. Grant, M.P.P.,

Minister of Education for Ontario.

Sir,—I have the honour to submit, herewith, my report upon the Elementary Schools throughout the Province.

I have the honour to be,

Sir,

Your obedient servant,

Jno. Waugh.

Toronto, February 3rd, 1921.

Introductory

Before entering upon an account of the present educational reconstruction which began in 1918, it seems advisable briefly to summarize the various changes in conditions in the elementary schools which have taken place since the last considerable reconstruction which was concluded in 1874.

The Work Accomplished by Ryerson

When Ryerson left the seat of Chief Superintendent of Education, he had provided for free elementary education. Fees had been abolished in all public and separate schools. Township Councils had power to divide each township into School Sections. Local machinery had been provided by the appointment of County Boards of Examiners for the licensing of teachers of the First, Second and Third Class. Two Normal Schools had been opened for the training of teachers. A set of text-books for use in all elementary schools had been authorized. A system of inspection had been instituted and a limit table was in force which divided the schools into Forms or Grades and determined the degree of advancement of the pupils in each subject required for promotion from Form to Form.

Though some 106 Secondary Schools had been established, it was not till some years later that the High Schools became a considerable factor in education. This means, that up to that time, and for some years later, the field covered by the Elementary Schools was necessarily wider than it is at present, and that considering their manifest disadvantages they performed their task fairly well. To offset these disadvantages they had certain not less obvious advantages: (1) The schools were well filled. (2) They were taught in many cases by men who had their way to make in the world; for it must be remembered that in these early days, when the country was still undeveloped and the people poor, the teaching profession was the only gateway to what were then known as the learned professions; and that the

public schools often enjoyed for a few years the services of men who have since found a place for themselves in the history of the country. Retrospect loves to dwell on these figures and perhaps prevents a just comparison of the earlier schools with those of to-day. (3) Life was much less complex than it is now, and the demands on the school for training in special subjects, consequently, less insistent. It was, therefore, possible with a narrower curriculum to carry forward the essential subjects beyond the limits of the present public school course, and it was not unusual to find even rural public schools preparing candidates for teachers' certificates.

Successive Changes in School Conditions

The changes which have come about in the constitution of the public schools are due mainly to three causes which, though suggested above, may be explicitly stated as follows: (1) The industrial expansion which began approximately in 1885, induced the trend of population cityward. The increase in wealth and the opening up of new opportunities withdrew the male teachers to more lucrative callings. (2) The colonization and development of the Western Provinces had effects precisely analagous, at any rate so far as the rural districts were concerned. The wholesale depopulation of the rural areas could not fail seriously to affect the rural schools. The male teachers were gone and the school population was diminished because many of the younger men had abandoned the farm. (3) But the third and most decisive factor in modifying conditions in the public schools was the development of the high schools through the organizing abilities of the late Superintendent of Education, who had then recently been appointed Inspector of High Schools. A division of labour was effected as between High and Public Schools in which, speaking generally, all the higher work was henceforth to be monopolized by the former. This division of labour seems at first sight to be as natural and inevitable in the field of education as it has proved to be in every other field of human enterprise.

The date, 1885, then marks approximately the beginning of the movement cityward and the gradual depopulation of the rural districts, as it marks also the beginning of the great era of expansion in secondary education. After this date, the success of the rural teacher began to depend more and more on the number of his pupils who succeeded in passing the Entrance examination. The work of the Fifth Form was either abandoned or discouraged. In 1892, when the educational authorities became aware of the change, an attempt was made to stimulate Fifth Form work in the Public Schools by making an annual grant of $5.00 per pupil to Boards conducting this work in their schools. Comment appears to be unnecessary.

Things went on until 1898, or thereabouts, when an attempt at the reorganization of the Fifth Forms was made. This met with some success, until in 1908, the best and most efficient of these were converted into Continuation Schools. These were intended to be a kind of rural High School, and were a response to the demand for greater educational opportunity for the rural districts. These schools derive the greater part of the sums required for maintenance from the Legislative and County Grants, and the fees of the pupils. The effect of their establishment has been still further to diminish the numbers of the older and more advanced pupils in the Public Schools. Whilst the High and Continuation Schools have thus taken over practically all the higher classes of the Public Schools, it must not be forgotten that they are giving from year to year back to the Public Schools teachers with much higher academic training than was possible under the old system.

The decrease in attendance at the Public School brought about by the depopulation of the rural districts and the successive drafts of pupils into the High and Continuation Schools, and the consequent curtailment of the Course of Study had two serious effects: (1) Public interest in the elementary school was impaired; for it is evident that interest in the school, or the lack of it, must bear a close relation to the number of families with children attending the school. (2) The second is a direct corollary of the first, when interest waned and the school grew smaller, the trustees were apt to think that so long as the school was kept open, it did not matter greatly whether the teacher engaged was highly qualified, experienced and efficient or not. The situation was serious, and was met (1) by the closing of all but seven model schools in Southern Ontario and the inauguration of new Normal Schools at Hamilton, North Bay, Peterborough, and Stratford for the preparation of more highly certificated teachers; (2) by the issue of Regulations sharply limiting the validity of all classes of certificates below the Second Class; and (3) by requiring Boards to pay a fixed minimum salary in proportion to assessment. This last was met with a storm of opposition which led to its withdrawal. An attempt was made to revive the interest of parents and ratepayers by requiring Public School Inspectors to meet with Trustee Boards and to hold public meetings of an educational character as often as practicable. The lack of new subjects felt to be of immediate and practical interest, and the difficulty of securing a representative audience, in many, perhaps in most cases, rendered this well-meant effort fruitless. The incorporation of several subjects of a practical nature such as Agriculture, Manual Training, Domestic Science, Practical Hygiene and Music in the Course of Study, which had been issued in 1914 at the urgent request of the Ontario Teachers' Association, was somewhat more effectual in linking up the interests of school and home. Whilst a considerable degree of elasticity was given to the Course by providing for modifications to be made where necessary by local School Boards and the Public School Inspector, the courses in the obligatory subjects were fully set forth and the distribution of the work as between the several Forms sharply defined. In making these provisions for the organization of the Course of Studies, the late Superintendent of Education always looked forward to a time, when with a more fully equipped and experienced teaching body, it would be possible to remove many of the restrictions.

Signs of Improvement

The preceding brief summary gives a pretty clear view of the situation and suggests the various problems which awaited solution at the beginning of the reconstruction period in 1918.

It has been suggested above that a *sine qua non* for the improvement of the rural schools must be a revival of public interest in them. A great change in this regard has been effected by the various reconstructions which are going forward, each supplying a vital motive for discussion and counsel. Some four hundred educational meetings have, during the past year, been held in the various parts of the Province under the auspices of the Department of Education. The Consolidation of Rural Schools, Medical and Dental Inspection, the Establishment of Auxiliary Classes, the Operation of the Attendance Act, the Constitution of Rural School Boards, and the various other suggested educational reforms have furnished matter for lively discussion at these meetings.

Trustees' Associations have been organized in many parts of the Province.

The press has generously thrown open its columns to the discussion of what is vaguely called the educational problem.

Outside organizations have been eager to lend their assistance. Among those whose co-operation has been of value to the Department, the Women's Institute is especially worthy of mention. It is to their unwearied efforts that much of the success of the movement for the Medical Inspection of Schools is due. They have, to mention only another of their activities, been influential in the propaganda for consolidation, and better rural schools.

The Canadian Red Cross Society, and the Victorian Order of Nurses, have also contributed to the forward movement; and arrangements have already been concluded with the first of these for a more complete co-ordination of their work with that of the Department.

More Highly Qualified Teachers

The most essential condition, however, for progress is the improvement of the teaching body. That very considerable progress has been made will be shown by an analysis of the table given below, which deals with the difficult period of the war and the year following when the teaching staffs of all countries involved in it were seriously depleted.

	Certificates of Teachers in Elementary Schools.				
Year.	1st Class.	2nd Class.	3rd Class.	Lower.	Total.
1914	878	7,387	1,771	1,510	11,546
1918	1,099	9,018	1,247	1,126	12,490
1919	1,246	9,193	1,159	1,257	12,855

(1) Average increase in the number of Public School teachers for each year of the war, 238.

(2) Average increase in the number of teachers holding First Class Certificates for each year of the war, 255.

(3) Average increase in the number of teachers holding Second Class Certificates for each year of the war, 408.

(4) Increase in the number of First Class Certificates in the year following the war, 147.

(5) Increase in the number of Second Class Certificates in the year following the war, 175.

(6) A comparison of the number of teachers graduated annually with the total teaching staff of the Province shows that not less than 10% of those who have obtained certificates have left the profession annually during these years, a condition serious enough for the schools but of infinite advantage to the homes they now adorn.

The table, however, shows that the expectation of Dr. Seath is being gradually realized, even in face of the most adverse conditions; and it must be a matter for congratulation that the teaching staff of the Province was not impaired but augmented in each year of the war.

Continuity of Service

Scarcely less important than highly qualified teachers is a desirable continuity of service, and it is to be noted that the average period of service in the same school is not much more than three years in the rural districts. If these schools are to

succeed, a means must be found to secure a greater degree of permanence. A teacher who intends to move next year is not likely to take very much interest in her present school or its fortunes, and experience gained in this way is likely to be valueless or worse. The Public School Inspector has little opportunity under these conditions, however zealous he may be, of assembling around him a corps of carefully trained teachers, especially as the time at his disposal for the inspection of each school is somewhat less than one day in the year.

It is evident that the only way to secure permanence is to increase the inducements to enter and continue in the profession. The greater the inducements the less will be the temptation to leave the profession or to relinquish an engagement. Under the present administration two important forward steps were taken:

(1) An additional legislative grant amounting to a quarter of a million dollars in Southern Ontario and to one hundred and ten thousand dollars in Northern Ontario was made to the rural schools. This with the former grants enabled the Department to pay approximately 25% of the salaries of all rural school teachers. The grant was distributed in such a way as to make it financially profitable in most cases for School Boards to pay salaries of not less than $1,000 for each Principal teacher. Whilst complete statistics for the year are not yet available, it is known that in several typical inspectorates the average salary paid has been increased to that sum. Below is given an extract from the report of the Public School Inspector for East Kent which illustrates the effect of the method of distributing these increased grants:—

"Sixty-six rural school Principals out of the seventy in this Inspectorate are receiving, the lowest $1,000.00—the highest $1,250.00.

"In view of this splendid increase, I wish to say that nothing short of the generous grant made for this purpose could have saved the situation as it did and had the grant not been made and apportioned as it was we should have had hundreds of schools vacant or in the hands of uneducated and untrained young persons. The mode of distribution of this grant has appealed to the Rural School Trustees as no other ever did and it swept low salaries out of East Kent not to return as long as these grants are paid.

"The salaries of Urban School Teachers have been indirectly affected by the increase in those of Rural Schools, which influence resulted in an increase of thirty-five per cent. over the average rate of last year."

Dr. MacDougall, Assistant Chief Inspector for Northern Ontario, reports that "the standard of teacher qualifications is steadily rising. Sixty per cent. over the entire area (Northern Ontario) are of Normal grade or higher, and but ten per cent. are without professional training. Much is due to the liberal salaries paid. In the rural schools of the newer districts the average is now little short of one thousand dollars per annum."

(2) The Township grant was increased or doubled in all but the poorest parts of the Province. This had the effect of distributing the load equally over the whole township, and whilst it made it possible for the smaller and weaker sections to increase the salaries paid to teachers without increasing their local tax rate, it was made evident to the larger and wealthier sections that the only way in which they could get a larger share of their own money back was to follow the example of their less favoured neighbours. The fact that these changes were effected with little or no friction is the strongest evidence that a more enlightened public opinion has

been awakened, which, regardless of personal advantage, is able to recognize the justice and wisdom of these measures. In the case of one Township, in the County of Welland, the Township grant was increased to $1,000; and in another the entire school tax was distributed equally over the whole Township.

It is, of course, too soon to estimate what effect these measures will have upon securing that permanency without which it is impossible to expect great improvements, but there is every reason for confidence in the issue. If the event should prove otherwise, it may be necessary to readjust the method of distributing the grants so as to place a premium on continuity of service.

Progress in Northern Ontario

Dr. MacDougall further reports as follows:

"Northern Ontario has educational problems peculiarly its own. Its newness, its vastness, its sparsity of settlement, its rapid development, its lack of municipal organization, multiply the difficulties of control and oversight. Its diverse needs demand unique treatment and call for individuality, initiative, courage, and self-denial on the part of its inspectors and corresponding qualities in its teachers, especially those who man the schools of the rural areas.

"Opportunity for every child, however isolated or remote from centres of settlement his home may be, is the ideal set. It is his inalienable right but the task of providing it may well tax the energy and ingenuity of every responsible officer. Where possible typical methods are followed, but others must be devised, and many are being used with more or less success. Part-time schools, itinerant teachers, board at points in section convenient to school, transportation by rail, by canoe, by horse or motor conveyance, all are called into requisition and other devices hitherto untried are now being put to the test.

"To meet advance in settlement twenty-six new sections have been formed of which fifteen are in the inspectorate of North Timiskaming. Twenty new schools have been built in rural areas. To tide over the time necessary to a more complete organization and the provision of up-to-date schools, temporary quarters are frequently supplied at times by rent of buildings but frequently the handy axeman turns his talent to practical account and the 'shack' school provides primitive but withal timely and comfortable accommodation."

School Inspection

Next in importance to an awakened public opinion and a supply of progressive teachers come a satisfactory system of school inspection. At present the rural Inspectors are appointed, practically for life, by the County Councils, from a list of persons duly qualified by experience and high academic standing. The salaries paid these officials until recently have been so small and the qualifications demanded so high that the supply from year to year has scarcely kept pace with the wastage. The recent increases in salary and the broadening of the Regulations will to some extent repair this defect. The appointment of these officials by the Minister, however, would considerably widen the field of choice; and it cannot reasonably be argued that it would appreciably diminish the authority of the local appointing body. An Inspector appointed ten years ago can now scarcely be said to be the appointee of the people. His constituents have largely changed in the interval.

All new appointments are invalid unless approved within one year by the Minister. This period is scarcely long enough to give the Inspector an opportunity

to adjust himself to new conditions or to allow the Department to estimate with a fair degree of certainty his suitability for the office.

The Inspector, by virtue of his position, is singularly free from those aspirations and anxieties which are born of competition with one's fellows, and unless he is a man of unusual fineness of make up, which is not infrequently the case, the continual round of ever-recurring duties in the same environment may tend to narrow his outlook and to lead him to exaggerate the importance of mere routine. If he escapes serious friction with his School Boards and the County Council his life is apt to be comparatively uneventful.

Some of the disadvantages referred to above, perhaps all of them, could be obviated if the Minister had power to move the Inspectors from one field to another as was deemed advisable. This plan would have these advantages, (1) it would give to certain men, who had through lack of experience, failed to make good in their first inspectorate a second trial under more favourable auspices, (2) it would give the Minister an opportunity to move men who, through the conscientious performance of their duties over an extended period of years, had incurred the dislike of powerful factions or individuals, to a new area of usefulness, (3) it would allow of the application of special talents to special situations, (4) it would not fail to enliven and rejuvenate the work by bringing the Inspector into contact with new situations and giving him a new viewpoint on the general problems of education.

At the last session of the Legislature, a vote of $3,000 was placed in the estimates for the purpose of giving those Inspectors who so desired an opportunity to visit the schools of the neighboring states for the purposes of observation. Four of the Public School Inspectors have applied for commissions, which have been assigned as follows: Inspectors Taylor and Benson to visit and report upon the rural and consolidated schools of Minnesota, Inspector Marshall, the rural schools of New York, and Inspector Hutchison the rural and consolidated schools of Iowa. The reports from these trained observers, who are not likely to be misled by failure to recognize differences in conditions between Ontario and the States to be visited, should be of the highest value to the Department of Education in dealing with rural school problems.

Some time ago, a memorandum was submitted for your consideration which suggested that a summer school should be established during the long vacation which School Inspectors might attend in order to exchange views, and to hear and discuss lectures on educational problems. The Course already established by the University leading to the degrees of B.Pæd., and D.Pæd., might well be made the nucleus of the course suggested above. The reports of the Inspectors mentioned in the preceding paragraph would also form suitable material for consideration. This course would afford the officials of the Department an opportunity of coming into closer touch with the inspectoral body and could not fail to be of very great value both to them and the Department.

The Little Schools and Consolidation

I approach with reluctance the fourth of the rural school problems which await solution, not that it is so difficult, but because the only satisfactory solution which can be given has become the subject of bitter and unreasoning prejudices. It is unnecessary to repeat here the considerations, so ably set forth in the pamphlet issued by the Department on the Consolidation of Schools, which render it difficult or impossible to carry on the work of education properly in a school where the

attendance is below the margin of efficiency. The line marking this level is variously placed at an average of from 10 to 15 pupils.

Whilst a general plan of consolidation, including all areas where it is practicable, would at once solve the difficulty, there are decisive reasons against its adoption being made immediately compulsory.

Some details of the progress of Consolidation are briefly given in the report of Mr. Chisholm, Assistant Chief Inspector:

Consolidated Schools

"During 1920, a steadily increasing interest was manifested in the subject of the consolidation of rural schools. At the request of local authorities, more than 200 meetings in all parts of the Province have been addressed by representatives of the Department of Education. These meetings as a rule were largely attended and the subject keenly discussed. Much literature of an informative nature has also been distributed.

"The results are significant. Ten consolidations were effected during the year at the following places: Stratton, Dorion, Tarentorus, Stamford, Barwick, Mimdemoya, Benmiller, Wellington, Savard and Etobicoke. Six of these are located in Northern Ontario, where the conditions under which isolated rural schools operate are more difficult than in Southern Ontario. Many surveys have been made in other localities in a number of which preparations are being completed for taking a vote in the near future. Mallorytown, one of last year's consolidations, has erected a modern four-roomed building that will be ready for use at Easter.

"The main difficulties anticipated by ratepayers in connection with these schools are the cost of maintenance and the transportation of the children. It is admitted that, in most cases, the cost will be somewhat greater than that of the present system. The Manitoba Minister of Education in addressing the Manitoba Trustees' Association in 1919, stated that 'although the consolidated school cost more, the people had much better value for the money spent.'

"The transportation problem, while it may present some difficulties, is not likely to prove insurmountable. In the Northern States of the American Union and in the Western Provinces of Canada where conditions are not unlike those of Ontario, the anticipated difficulties have largely disappeared in the test of actual practice. The United States at the present time has more than 140,000 school routes along which children are transported to central schools. The good work done in the past by the isolated one-roomed rural school must be recognized, but in many parts of the Province, rural conditions are changing. The small attendance in many schools with the consequent excessive cost per pupil and the waste of teaching power, the difficulty of obtaining and retaining good teachers, the scarcity of male teachers, the demand for the more efficient graded school and the necessity for education beyond the 4th Form, are inducing many intelligent people to look with favour upon the consolidated school idea.

"A typical school of this character has a workshop for the practical training of boys and girls, a teacher's residence and wide grounds for cultivation and recreation. It is a school which affords facilities for the co-operative training of the heart, head and hands of the children. Along these lines Denmark is to-day recognized as the world's greatest scientific agricultural nation, and this has been made possible by giving Denmark 'the best rural school system in the world.' A country's greatest asset is its educated people."

Inspector Marshall speaking of the Falls View Consolidated School, recently established in Welland County, has this to say: "Our first Consolidated School Board was elected and organized in July, 1920, and on September 7th the Falls View Consolidated School began its work with two van routes established and two vans carrying twenty children each. Parents and children who thought they saw difficulties in the way at first have nothing but praise for the system now. Just yesterday I asked for a show of hands, among the children concerned, of those who would be willing to go back to the old school in No. 9 Stamford, and they only laughed at the absurdity. The regularity of attendance is increased from 76 per cent. in the former No. 9 to 95 per cent., and every absentee has a valid reason."

We now have a sufficient number of consolidated schools to demonstrate the value and practicability of this method of organization in every part of the Province; the Hudson Consolidated School and the Savard Consolidated School for the North, the Stratton Consolidated School for the North-west and the Mallorytown Consolidated School, nearing completion, for Eastern Ontario.

There are a great number of very small rural schools and it would appear advisable to allow these to try out the possibilities of transportation to a larger school for a period of one, two or three years, arranging for provincial assistance, where it would appear that the cost of transportation and maintenance exceeded the cost of maintaining the one-roomed school. A sufficient grant to purchase the vans would, in many cases, induce the local communities to make the experiment.

In many parts of the Province, this plan could be carried into effect without enlarging the school plant. On account of the depletion of rural school population, there are at present many two-room schools where only one teacher is engaged, and many one-room schools where the capacity is sufficient to accommodate pupils from one or two of the adjoining rural schools. Where this plan is adopted, however, the Department should insist on the accommodations and equipment being thoroughly modernized. This plan would also introduce a scheme for conducting consolidated night-schools in the rural areas, and grants should be assigned for these at least as liberal as are now provided for night schools in urban centres.

Improvements in School Plant

It is necessary only to look around to become aware of the great improvement which has recently been effected in the type of schools now being erected. S.S. No. 16 Nottawasaga, in the County of Simcoe, near Glen Huron Station, built at a cost of $16,500 upon a section assessment of $146,000, is perhaps the best one-room rural school in the Province. This school is practically fitted up with city facilities. An abundant supply of water is provided through sanitary drinking fountains and modern methods of sanitation have been made possible.

The beautiful rural schools erected recently at Ridgeway and S.S. No. 2, Saltfleet, indicate what is possible where communities are fully alive to the importance and value of education. The new four-room school at Islington, built on the one-storey plan, with its beautiful and commodious Assembly Hall, is perhaps the best type of village school built within the year.

A visit to the Secord Public School, in the Township of York, will be well worth while for those who are investigating the best type of suburban school.

There is scarcely a city in the Province of Ontario which has not at least one new school to indicate the strength of the movement for better school buildings,

but perhaps the best of these is the new public school recently erected in the City of Windsor. The new St. Joseph Separate School there with its class-rooms for retarded and physically defective children will well repay a visit.

The Individual Factor

Whilst the past year, as has been shown, has been marked by a great amount of educational activity, especially designed to broaden and enliven public opinion with regard to present day educational needs, it has also been marked by a more definite and practical recognition of the principle that education, whatever its organization may be, must always consider the interests, capacities and opportunities of the individual pupil. The operation of this principle has developed certain modifications and extensions in the organization of the Provincial system, which are briefly sketched below:

(1) The Summer School for School Nurses

This school, the first of its kind in the Dominion, was inaugurated in the summer of 1919 with the purpose of giving to school nurses already in service or to registered nurses who wished to take up school nursing as a profession, an additional training to fit them specially for this kind of work. Although only thirty nurses presented themselves for training the success of the experiment and its value for education were so evident that in the summer of 1920, the school was again carried on with a well-rounded and completed curriculum, and a first-class staff of instructors. The number of nurses in attendance sprang from 30 to 64. School nurses from all over the Province and some from the neighbouring States of the Union applied for admission. Annesley Hall was, through the courtesy of Chancellor Bowles, of Victoria University, opened as a residence for those in attendance, and the results were even more gratifying and fruitful than in the previous year.

The Canadian Red Cross Society had in the meanwhile made overtures to the University of Toronto, which resulted in the establishment, in the autumn of 1920, of a Department of Public Health Nursing, with Miss Russell as Director. This Department covers in part the course of the Summer School for school nurses, and the course, with some necessary additions might be accepted by the Department of Education as qualifying for the certificate of "An Approved School Nurse." Although it may still be necessary for some few years for the Department of Education to conduct the Summer School for School Nurses for the benefit of those who receive or have received appointments without this previous special training, an agreement might be reached which would ultimately entrust this work wholly to the University.

(2) Auxiliary Classes

Closely related to the proper organization of a school nursing service is the organization of a system of Auxiliary classes. In June of 1920, Dr. Helen McMurchy, formerly in charge of this work in conjunction with her duties as Inspector of the Feeble-minded, resigned her position. After a careful canvass of the whole situation, it was felt that the work was of such pressing importance that the whole time of one official should be given to it. Dr. S. B. Sinclair, of the Department of Education, who had devoted many years of his life to Child Study, and who had moreover, the special advantage of being a trained psychologist was in October selected as Inspector of Auxiliary classes. Prior to his appointment "The

National Committee of Mental Hygiene," acting under the instructions of the Department of Education, had made a preliminary survey of certain city schools to discover the proportion of children in such schools who should be cared for in "Special Classes." Their valuable services were continued without charge under the reorganization until the end of the year, when an agreement was reached by which they were to carry on the work along certain definite lines for little more than a nominal sum, until the Department should be in a position to undertake it, independently. Further details will be found in the report of the Inspector of Auxiliary Classes. The interest displayed by many cities and towns in the care of "the unfortunate" would seem to justify the hope that an early and satisfactory organization will be effected in most urban municipalities. The much more difficult problem presented by the smaller urban and the rural municipalities will form the subject of another report.

It has been suggested above that the work of the school nurse has much in common with that of the teacher of an auxiliary class. To give merely a single illustration—the school nurse deals with the physical weaknesses and defects of the child. These are closely related on one side to the whole problem of retardation with which the teacher of the auxiliary class has to deal. This suggests that the special training of the school nurse and of the auxiliary class teacher might well be conducted in the same institution, this institution of course, making provision for the necessary specialization where the work has to be differentiated or extended. I am convinced that whether this work is in future to be done in the University or in the Departmental Summer Schools, there must be serious loss where this correlation is not turned to account.

(3) The Medical Inspection of Schools

The work of organization begun in May, 1918, and approached experimentally from several different angles is now measurably near completion. In this as in all the varied work of educational reconstruction carried into effect since the war, an attempt has been made to secure the sympathetic and active support of awakened and intelligent public opinion. The Department has relied solely upon placing the facts squarely before the people and awaiting the only reply which an awakened public conscience can give. The work was begun with a staff of three doctors and three nurses. This staff has been augmented by the addition of Dr. Cockburn, Dr. Robertson and Dr. Curtin and Nurse Lunn, Nurse Campbell and Nurse Lowry to the field staff. The organization in addition to these now includes three school nurse demonstrators, Nurse Lee, Nurse Willoughby and Nurse Hunt. These latter follow up the surveys made by the field staff and give a demonstration—over a more or less extended period—of the work which may and should be accomplished by a local school nurse. It will be necessary to increase the number of school nurse demonstrators to ten in order to meet the present demands. The development of the work made it necessary to appoint a Chief School Medical Officer and a Chief School Nurse. Dr. Phair, formerly Director of School Medical Inspection in the City of Toronto was selected for the former and Nurse Jamieson, President of the Graduate Nurses' Association for the latter position.

Grants

It is also proposed to make grants of $10 per classroom to rural schools and urban centres combining with rural schools to assist and encourage local centres to institute and carry on a system of Medical Inspection. Grants to Urban Boards

have also been provided under a schedule already issued. The regulations have been revised to enable township and county councils to become parties to agreements between School Boards for the Medical Inspection of their schools.

To carry out the programme as outlined above a sum of not less than $75,000 will be required for the coming year, distributed as follows:

	Salaries.
Chief School Medical Officer	$4,000 00
Chief School Nurse	1,800 00
Six Field Medical Officers	12,000 00
Six Field Nurses	6,000 00
Ten Nurse Demonstrators	10,000 00
Travelling Expenses	33,000 00
	$66,000 00
Grants for first year	9,000 00
Estimated to amount to	$75,000 00

The expenditure of such a sum must seem inconsiderable to anyone who becomes aware of the vast amount of misery and loss it would prevent. The possibility of the highest kind of intellectual and moral efficiency is conditioned upon physical well-being. Nearly every function of the school bears in one phase at least a relation to the health of the child. The distance he travels to school, the length of the recitation periods, the alternation of intellectual work with manual and physical exercises, the purity of the water he drinks, the time, place and circumstances under which he eats his luncheon, the heating, lighting and ventilation of the building in which he studies, even his relations with his fellow pupils and his teacher all have a direct bearing on his health. At least fifty per cent. of the problem of education is after all a health problem. This being the case, it must be at once conceded that to neglect or underestimate the importance of safeguarding the health of the child is to fail to understand the most fundamental fact in education.

(4) Director of Physical Education

The considerations stated above have been so urgent in their appeal that the question of securing the services of a Director of Physical Education for the Province has already engaged your attention. The value of play as a factor in intellectual and moral education—perhaps even in physical education—has not been fully recognized. Its full meaning and significance for life is one of the lessons of the war which has also strangely taught us to place less reliance than formerly on military drills and exercises.

Play in the past has assumed too much the character of sport, in which all the prizes go to the strongest. Its great value would rather appear to lie in the possibilities, when properly managed which it opens up for the development of the puny and feeble into a sturdy, healthy and happy childhood. The Chief School Medical Officer, with his staff, along with the Inspector of Auxiliary Classes, and the Director of Physical Education, would form a complete administrative unit.

(5) The Northern Academy

The various plans to improve school attendance such as (1) the enlarged powers placed in your hands by the statutes to direct trustees to convey pupils to school under certain conditions, (2) the operation of the School Attendance Act, (3) the powers placed in the hands of the Chief School Attendance Officer to open and operate schools where the local authorities refuse or neglect to act, (4) the opening of several consolidated schools, have all had an influence towards the improvement of former conditions.

There still, however, remained a class of cases not provided for by any of the above, and for which "the itinerant teacher" must always prove a more or less unsatisfactory remedy. In the remote and out of the way districts and in the "Hinterland" there are "pockets" of fertile, grazing, timber or small mining country, where there are perhaps only three or four children of school age for whom no school facilities are or can be available.

In the early summer of 1919, the first timid proposal was made to make use of the buildings recently vacated by the Soldiers' Settlement on the Experimental Farm at Monteith, for the purpose of offering to such children as these the opportunities of an education hitherto denied them, but it was not until January of the present year that the school was opened as the first Provincial Residential School of the kind on the Continent. The fees charged for tuition, board and lodging, are little in excess of what it would cost the parents for the upkeep of the children in their own homes.

The opportunities afforded by such an institution for the training of teachers could not possibly escape attention, especially in view of the existing needs. Accordingly, the school Regulations provide for a primary, a secondary, and a teachers' training school conducted under a free curriculum. This organization is planned to admit of the school becoming a sort of educational laboratory for experiment and research. The limits of this report forbid a more extended notice; but it is not impossible that when the time comes to write the history of this school, it will rival in historic interest and educational importance the story of Pestalozzi's famous experiments at Yverdun.

Conclusion

Whilst the above report does not profess to do more than merely touch upon the various phases of educational reconstruction which have been effected or are in process, it is hoped that it will give some idea of the wide field which has been covered and of the new outlook in education.

It is impossible for me to conclude this report without some acknowledgment of the earnest, self-sacrificing and able efforts of the Public and Separate School Inspectors everywhere throughout the Province to second and to carry out the proposals for reform which have been made by the Department. I am convinced that notwithstanding the difficulties which have confronted them and the limitations under which they have worked, their efforts have not only commended themselves to the public, but have had a most beneficent influence for the advancement of education.

I deeply regret to be compelled to record that one of the ablest and most devoted of these Inspectors, Mr. Henry Ward, Toronto, was called away by death in the early winter of the year, leaving behind him a host of friends and fellow-workers to mourn his loss.

APPENDIX B

REPORT OF THE DIRECTOR OF INDUSTRIAL AND TECHNICAL EDUCATION

To the Honourable R. H. Grant,

Minister of Education for Ontario.

Sir,—

I have the honour to submit herewith my Annual Report on Industrial and Technical Schools.

I have the honour to be, Sir,

Your obedient servant,

F. W. Merchant.

Toronto, January 28th, 1921.

Progress During the Year 1919-20

The advance made during the year in the organization of vocational instruction has been very gratifying. Evening schools were organized in thirteen new centres in the academic year 1919-20. In the autumn of 1920 new schools were opened at Barrie, Fairbank, South Porcupine, Preston, Espanola, High Falls, and Kenora. The enrolment of students and the interest of the public in the new schools give promise of permanent service. Evening classes are now being conducted successfully in fifty-eight centres.

The statistical reports will be found on pages 258-269. I submit some comparisons which show the marked progress in all departments of the work.

Attendance at Evening Industrial, Technical and Art Classes

Items	1918-19	1919-20	Increase	
			Total	Percentage
1. Number of teachers	611	845	234	38.29
2. Total number of students on the roll for the year	16,733	26,527	9,794	58.53
3. New students admitted during the year	10,699	16,872	6,173	57.69
4. Boys and men on roll	7,403	13,707	6,304	85.15
5. Girls and women on the roll	9,330	12,820	3,490	37.40
6. Students whose birthplace is Canada	11,056	17,161	6,105	55.21
7. Students whose birthplace is the British Isles	4,293	7,565	3,272	76.21
8. Students who were born in other countries	1,384	1,801	417	30.13

Attendance in Courses of Instruction at Evening Classes

Subject	1918-19	1919-20	Increase	
			Total	Percentage
1. Mathematics	4,887	8,668	3,781	77.36
2. English	4,609	9,690	5,081	110.24
3. History and Civics	43	493	450	1,046.51
4. General Physics	44	186	142	322.72
5. Electricity	1,160	1,552	392	33.79
6. Heat and Power Plant	462	1,030	568	122.94
7. Chemistry, Mineralogy and Geology.	381	474	93	24.41
8. Metallurgy and Assaying	22	23	1	4.54
9. Mechanical Drawing and Machine Design	1,627	2,480	853	52.42
10. Architectural Drawing and Building Construction	225	360	135	60.00
11. Surveying and Mapping	15	14	—1	—6.66
12. Art and Design	688	1,378	690	100.29
13. Modelling	46	100	54	117.39
14. Basketry	.....	98	98	.....
15. Pottery	29	55	26	89.65
16. Photography and Lithography	31	46	15	48.38
17. Carpentry, Joinery and Cabinet Making	140	146	6	4.28
18. Pattern Making	11	32	21	190.90
19. General Woodwork	437	500	63	14.41
20. Wood Carving	.....	131	131	.....
21. Machine Shop Practice and Forge Work	612	1,203	591	96.56
22. Sheet Metal Work	.....	16	16	.....
23. Plumbing and Sanitary Engineering.	122	269	147	120.49
24. Auto Mechanics	1,108	2,059	951	85.83
25. Marine Engineering	.....	17	17	.....
26. Navigation	.....	26	26	.....
27. Show Card Writing	181	441	260	143.64
28. Lettering	122	331	209	171.31
29. Bookkeeping for Industrial Purposes.	232	823	591	254.74
30. Telegraphy	50	114	64	128.00
31. Domestic Science	2,044	2,738	694	33.95
32. Domestic Art	4,716	7,483	2,767	58.67
33. Hygiene and Dietetics	98	86	—12	—12.24
34. Home Nursing	698	420	—278	—39.82
35. Power Machine Operating	42	133	91	216.66
36. French	523	550	27	5.16
37. Spanish	52	78	26	50.00
38. Physical Culture	894	1,157	263	29.41

Attendance at Day Industrial, Technical and Art Schools

Items	1918-19	1919-20	Increase	
			Total	Percentage
1. Number of teachers	155	177	22	14.19
2. Total number of pupils on roll for year	4,739	4,790	51	1.07
3. New pupils admitted during the year.	3,348	1,469	—1,879	—56.12
4. Pupils admitted for the first time to a secondary school	1,239	1,234	— 5	— .40
5. Boys on the roll	3,013	2,936	—77	—2.55
6. Girls on the roll	1,727	1,854	127	7.35
7. Average daily attendance for the year.	2,534	2,771	237	9.35

Growth as Shown by Financial Statements

The growth during the year is shown also by the remarkable increases in the amounts spent by municipalities on the promotion of industrial and technical education.

	1918	1919	Increase
Receipts:			Per Cent.
Legislative grants	$110,637 01	$140,294 41	26.80
Local municipal grants	329,048 84	340,914 50	3.61
School fees	22,326 37	38,171 04	70.97
Balances and other sources	228,298 51	312,754 45	37.00
Total receipts	$690.310 73	$832,134 40	20.54
Expenditure:			
Teachers' salaries	$246,076 85	$324,193 44	31.74
Permanent improvements	64,096 03	117,170 54	82.80
Repairs	2,234 63	13,465 30	502.57
Library, apparatus and equipment	40,313 12	60,958 81	51.21
All other expenses	140,479 23	143,284 73	2.00
Total expenditure	$493,199 86	$659,072 82	33.63

The large balances shown are accounted for by the fact that the financial statements are for the calendar year, while the expenditures are completed at the end of the school year.

The statements of receipts and expenditures of municipalities for the year 1920 have not, as yet, been received. Information concerning the Legislative grants paid under the Regulations is, however, available. The totals of these grants paid to local municipalities during the year 1920 are as follows:—

Legislative Grants, 1920

Grants on salaries	**$203,011 13**
Grants on equipment	**60,417 44**
Grants on buildings	**366,773 72**
Total	**$630,202 29**

The grants are paid to the local boards according to the following scheme:

(1) *Salaries.* A grant calculated as follows: 75% of the expenditures on salaries up to and including $2,000, and the following percentages of all expenditures on salaries above that amount:

66⅔% of the expenditure above $2,000 and up to and including $5,000;
50% of the expenditure above $5,000 and up to and including $10,000:
33% of the expenditure above $10,000 and up to and including $15,000;
25% of the expenditure above $15,000.

(2) *Equipment.* Fifty per cent. of the cost of equipment specially provided in any one year for evening or day Industrial, Technical or Art Schools and approved by the Minister.

(3) *Buildings.* Fifty per cent. of the cost of buildings especially constructed for day or evening Industrial, Technical or Art Schools and approved by the Minister.

(4) *Equipment and Buildings in the Districts.* The yearly grant provided in (2) and (3) is 75% in each case.

This scheme of paying grants affords substantial aid to local municipalities in erecting and equipping special Industrial, Technical or Art Schools. The year 1920 is the first full calendar year in which this scheme has been in force. The effect of the grants on capital expenditure, in stimulating local school authorities to provide vocational education is seen in the large grants on equipment and on buildings earned during the year.

Dominion Government Grants

The Technical Education Act of the Dominion of Canada became effective during the year 1920. Under the terms of this Act a sum of money is set aside each year to be paid to the Provinces in proportion to their populations for the purpose of promoting and assisting technical education. The Dominion grant to any Province in any one year is not to exceed, however, the amount that the Provincial Government expends on technical education.

The total grants from the Dominion to the Province of Ontario available for the Dominion fiscal years are as follows:

April 1st, 1919, to March 31st, 1920	$224,383 30
April 1st, 1920, to March 31st, 1921	259,528 10
Total	$483,911 40

Statements of progress in the Ontario schools and of the expenditures by the Provincial Government up to October 30th, 1920, have been made to the Dominion Government. Of the total amount available from the Dominion fund up to March 31st, 1921, the Province has already received two grants of $106,297.63 and $118,491.67, totalling $224,789.30.

Building Operations

As I have pointed out in previous reports, the extension of day and evening vocational work in the Province has been limited by the lack of suitable buildings and equipment. To remove this obstacle the Department, in reconstructing the scheme of grants when the Dominion funds became available for vocational education, provided for liberal assistance to municipalities that would undertake to provide satisfactory accommodation for vocational classes. Assistance is given in accordance with an agreement made between the municipality and the Minister of Education, in which the municipality promises on its part to promote diligently the work of vocational education, to endeavour to use the building or portion of the building set aside for vocational education to its fullest capacity, and to provide such management, teaching staff and equipment as meet the approval of the Minister.

The liberal grants available under such agreements have had a marked effect in stimulating building operations during the year. Niagara Falls has just completed a building, erected on the grounds of the Collegiate Institute, for vocational education. The building has two storeys, without basement. It provides for classrooms, a woodworking shop, a machine shop, a mechanics laboratory, an electrical laboratory, a draughting room, a cooking laboratory, and a dressmaking room. A special feature is the electrical laboratory which has been designed to provide accommodation and equipment for training the numerous electrical workers in the district in the management and maintenance of equipment used for the

generation and transmission of electrical energy. The building was occupied in January, 1921.

In Sudbury, the new Technical School building, plans of which were shown in my last Annual Report, is nearing completion. This building has three storeys, without basement, and is of reinforced concrete and brick construction. It is specially designed for teaching mining classes and is generously provided with the necessary laboratories, shop and milling rooms for efficient instruction in both day and evening classes in the mining and related industries. This building will be ready for occupancy in September, 1921.

The erection of the new Technical School wing of the Fort William Collegiate Institute has proceeded rapidly, and the building will be ready for use in September, 1921. It is of reinforced concrete and brick, of the same design as the new Collegiate Institute wing recently erected, and is provided with shops and a specially-designed electrical laboratory. Fort William, like Niagara Falls, has a considerable group of electrical workers concerned in the generation and transmission of electricity.

A new building for the Ontario College of Art is being erected by the Ontario Government under the Industrial Education Act on a site adjacent to the Art Gallery. In this new building, which is rapidly nearing completion, the College of Art will have greatly improved facilities for carrying on its work, and particularly that directly related to industrial design and applied art.

The Advisory Industrial Committee of the Board of Education of Toronto has submitted and received approval of plans for a new Branch Technical School in the east end of the city. The committee of the Hamilton Board has also submitted and received approval of plans for the erection of the main building of the Hamilton Technical School.

A referendum on the question of co-operating in the building of a Technical School was carried by large majorities in Windsor and Walkerville. As soon as the necessary legislation has been secured and a joint board or commission formed, these Border Cities expect to push forward the project. The referendum approved a proposal for a building costing approximately $500,000.

Interesting Features in the Extension of the Work

The reports of the organizers on their visits of organization or inspection furnish many interesting illustrations of the importance of the work and of the means taken to extend it. For example, the report on Sudbury instances the case of a young man who had attended the 1919-20 classes in mathematics in Sudbury and was transferred during the summer to High Falls. Appreciating the value of the instruction received in the class and desiring to continue his study, he personally organized a class among the men in the power plant at High Falls. This class, thirteen in number, included all the men in the plant. The class was reported to the Department of Education and was placed under the charge of the Sudbury Advisory Industrial Committee. Mr. Matheson, of the Staff of the Mining Department of the Sudbury High School, was appointed teacher. He makes regular trips to High Falls, and he reports that the pupils are doing excellent work.

A novel feature of the evening class work in connection with commercial classes in Fort William during the season 1920-21 is a course of lectures on Modern Business given by the leading business men of the city. These lectures are free and no enrolment is required of the persons attending them. Each of the lectures has been attended by about seventy persons, including not only prominent busi-

ness men, but juniors from the banks, offices and shops. The subjects of the lectures are shown in the following programme:

Date.	Subject.	Lecturer.
Nov. 5	Explanatory Statement	C. Birkett.
	Business Economics	J. R. Lumby.
" 12	Banking Principles	G. E. Ewing.
" 19	Domestic and Foreign Exchange	H. E. Girvan.
" 26	Investment	N. M. Paterson.
Dec. 3	Accounting Principles	P. H. B. Dawson.
" 10	Insurance	R. H. Neeland.
" 17	Science of Government	Dr. R. J. Manion, M.P.
1921.		
Jan. 7	Commercial Law	Fred Babe.
" 14	Transportation	A. F. Hawkins.
" 21	The Exchanges and Speculation	A. G. Bastedo.
" 28	Properties and Estates	G. R. Duncan.
Feb. 4	Business Correspondence	C. Birkett.

It is stated by persons who attended the lectures that they are interesting, practical and instructive. The success of this feature of the Fort William evening class work suggests that such a course of lectures might be organized in other centres, not only on commercial subjects, but on industrial or other vocational subjects. A course of lectures on Modern Industry for managers, superintendents, foremen, and men might include such subjects as the following: Shop Management, Employment Management, Raw Materials, Transportation, Exchange, Markets, Group Insurance, Compensation Act, Factory Acts, Industrial Relations, Adolescents in Factories and in Schools.

Another special feature of the year's work has been the applications from unemployed persons for instruction in slack-time day classes. In several of the technical schools—Hamilton, London, Ottawa—arrangements have been made for the admission of such applicants and for providing the instruction desired.

The Appointment of an Organizer for Girls' and Women's Work

The increasing demands for instruction made it advisable to appoint an officer to take charge of the organization of the home-making and the trade and industrial classes for girls and women. Miss Elsie I. McKim, who has had a thorough training and wide experience in all branches of the work, was given charge of this department. She entered upon her duties in September, and has already visited most of the schools. She has been of great assistance to principals and teachers in organizing their courses and in improving the methods of instruction.

Preparation for the Operation of the Adolescent School Attendance Act

School Boards have been seriously considering the preparations which should be made for the operation of the Adolescent School Attendance Act. The necessity for offering a variety of courses to meet the needs of those who will be required by the terms of the Act to remain in school under either part-time or full-time instruction is presenting many new problems.

Advisory Committees are concerned with providing the courses and the accommodations for those who will desire to take vocational as well as academic instruction. These committees in a number of cities have asked for assistance from the Department of Education in ascertaining their needs and in forming plans to meet them. In most cases the assistance asked for could not be given until certain facts bearing upon local situations were ascertained. To obtain these facts surveys have been made in a number of centres by officers of the Department.

Industrial Education Surveys

The following surveys were made during the year: The Border Cities (Ford, Walkerville, Windsor, Sandwich, Ojibway), by Dr. J. C. Miller; Galt, Guelph, and Peterborough, by Dr. Miller and F. S. Rutherford; Fort William and Chatham, by F. P. Gavin; Brantford, by Dr. Miller and F. P. Gavin.

The information required in most cases relates to the following questions:

(1) Is the need for vocational education in the community concerned sufficient to justify the establishment of a Day Vocational School under the provisions of the Industrial Education Act?
(2) If established, what should be the range of work undertaken by such a school?
(3) What accommodation should be provided and within what general area should such a school be located?

The making of these surveys was greatly facilitated by the co-operation of the local organizations representing employers and employees, the municipal officials, the members of the school boards and advisory industrial committees, the school principals and inspectors. The individual employers and their executive officers were invariably willing to give the information desired, to show the agents of the Department through their plants, and to discuss with them in a helpful fashion the ways in which the preparatory and supplementary training which can be given in a vocational school would be of value to the industries.

In general, the information required to answer the questions proposed includes the following:

(1) Adolescents attending school classified as to age and grade.
(2) Adolescents not attending school—estimated as closely as available data permitted.
(3) General employment classification—industrial and commercial.
(4) Employment classification of girls and women.
(5) Employment classification of adolescents.
(6) Growth and distribution of population and schools.
(7) Lines of traffic—streets and street cars, etc.
(8) Financial status of municipality—assessment, tax rate, indebtedness.
(9) Best judgment of those engaged in industrial and commercial work regarding (*a*) the most suitable preparatory training before employment and (*b*) the most suitable supplementary training during employment.
(10) Preliminary information regarding the operative and manipulative skills and the related knowledge required for successful participation in the various occupations.

Number of Adolescents for Whom Instruction must be Provided

School boards are particularly interested at the present time in obtaining information regarding the number of pupils for whom full-time and part-time instruction must be provided under Section 3 of the Adolescent School Attendance Act. Calculations have been made from actuarial tables and the returns of the Dominion census, and the results have been compared carefully with the information obtained in the surveys made by the officers of the Department. The general conclusion is that adolescents between fourteen and sixteen years of age constitute about 3.5% of the population in urban centres, and that of the total number of adolescents within these age limits from fifty to sixty per cent. are already in attendance at school. While the numbers may vary in different municipalities, the figures are sufficiently accurate to give boards a fair idea of the number of pupils to be provided for under a strict enforcement of the Act.

Types of Schools Needed to Carry Out the Provisions of the Adolescent School Attendance Act

I described in my Report of 1918 some of the types of schools needed to provide for the instruction of adolescents in full-time and part-time schools. The surveys made are giving us more detailed information bearing on this question. The technical branch has in view the issuing of circular letters or bulletins giving in greater detail suggestions respecting the organization of courses. The officers of the branch will be ready at all times to lend assistance to boards in forming or carrying out plans.

Peterborough Survey

I submit herewith the report on the Peterborough Survey in the hope that it may be of value to school boards in other municipalities where conditions are somewhat similar. The appendices are omitted because they are not of general interest.

Memorandum to Dr. F. W. Merchant, Director of Technical Education

In response to the request of the Advisory Industrial Committee and as directed by you we made a survey of the situation in Peterborough as it is related to the question of establishing a vocational school.

In the memoranda attached will be found tabulated and arranged digests of the information secured. We regret our inability to secure accurate information regarding the number of adolescents 14-18 years of age who are not attending school. As a complete census of this group will be required in connection with the enforcement of the Adolescent School Attendance Act, we deemed it unwise to put the local authorities to the trouble and expense of making such a census at this time.

Special acknowledgment is due local organizations and individuals for assistance given and courtesies extended. The Manufacturers' Association, the Trades and Labour Organizations, the Municipal Officials, the Advisory Industrial Committee, and the Board of Education, met all our requests with a generous response. The individual employers and their executive officers were especially helpful in giving information, in permitting us to go through their plants so as to acquaint ourselves more fully with the work being done by their employees, and in discussing with us the extent to which the preparatory and supplementary training given in a vocational school would be helpful. Mr. Fraser, Secretary of the Board of Trade; Mr. Hagerman, Principal of the Evening Industrial Classes; Mr. Kenner, Principal of the Collegiate Institute, and Mr. Jamieson, Head of the Commercial Department in the Collegiate Institute, gave assistance. To Inspector Mowat our special thanks are due for assistance given in making the studies of the individual plants and in securing for us the data regarding the adolescents attending and not attending the schools in the city.

JAMES C. MILLER,
Assistant Director.

F. S. RUTHERFORD,
Organizer.

TORONTO, October 16th, 1920.

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Employment.

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Section 3

The Questions Answered.

APPENDICES

1.

Data *re* Adolescents.

2.

Data *re* Employment.

3.

Distribution of Population.

and

Municipal Statistics.

4.

Survey Returns from Industrial Establishments.

SECTION 1.

Questions to be Answered

1. Is the need for vocational education in Peterborough sufficient to justify the establishment of a Day Vocational School under the Industrial Education Act?

2. If established, what should be the range of work undertaken by such a school?

3. What accommodation should be provided and within what general area should such a school be located?

SECTION II.

Analysis of Information

A.

Adolescents in Peterborough. (*See Chart No. 1.*)

1. *Adolescents attending school*:

Age	Collegiate Institute	R. C. Advanced Schools	Totals for High Schools	Public Schools	R. C. Separate Schools	All Elementary Schools	Totals all Schools
12.....	9	17	26	314	102	416	442
13.....	37	19	56	237	58	295	351
14.....	83	28	111	102	35	137	248
15.....	95	34	129	35	10	45	174
16.....	96	26	122	11	0	11	133
17.....	51	11	62	5	0	5	67
18.....	28	3	31	0	0	0	31
19.....	8	0	8	0	0	0	8
Totals.....	407	138	545	704	205	909	1,454

Sex	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Totals.....	185	222	67	71	252	293	345	359	101	104	446	463	698	756

2. *Adolescents not attending school*:

Estimated number 14 years of age not attending school.....	152
Estimated number 15 years of age not attending school.....	225
Estimated number 16 years of age not attending school.....	260
Estimated number 17 years of age not attending school.....	325
	962

NOTE.—The basis used in making these estimates has been checked with that found to be satisfactory in Milwaukee and also with that worked out by the Dominion Census Bureau, and has been found to be reasonably accurate.

3. The number of adolescents 14-16 years of age attending and not attending school is 422 + 377, or 799.

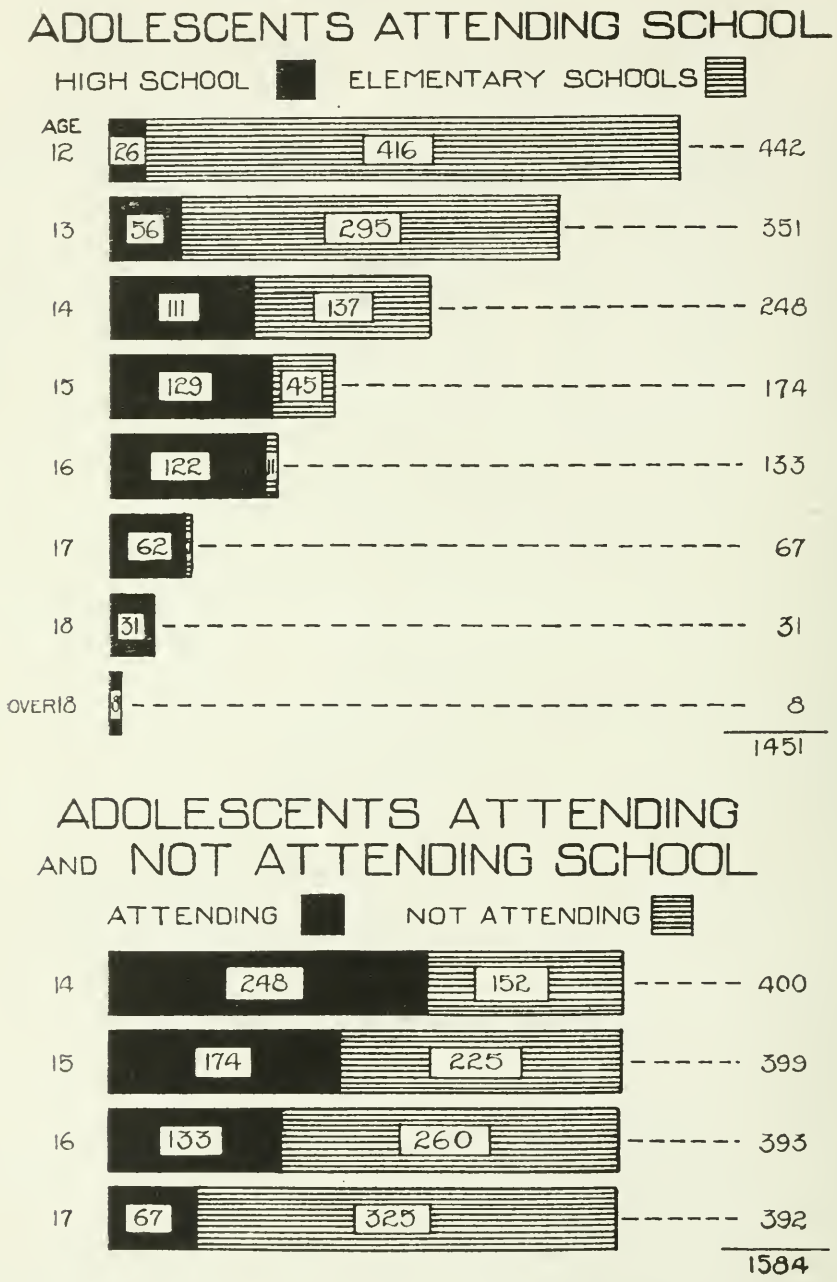
The number of adolescents 16-18 years of age attending and not attending school is 200 + 585, or 785.

The number of adolescents 14-18 years of age attending and not attending school is 622 + 962, or 1,584.

NOTES:—*a.* If the adolescents now 14-16 years of age not in school were to be required to attend school under the provisions of the Adolescent School Attendance Act, an additional group of approximately 377 students would have to be provided for in either full-time or part-time day classes.

b. In the autumn of 1922, when the organization of part-time classes is to be required, there will be, if present ratios persist, a group of 793 adolescents 14-16 years of age, of whom 418 may be expected to be in full-time attendance at school and 375 in full or part-time attendance at school, to be provided for.

c. In the autumn of 1923 there will be the additional group of adolescents 16-18 years of age, who will come under the part-time requirements of the Adolescent School Attendance Act, for which provision will have to be made.


ADOLESCENTS ATTENDING SCHOOL
HIGH SCHOOL
ELEMENTARY SCHOOLS
AGE
12
26
416
442
13
56
295
351
14
111
137
248
15
129
45
174
16
122
11
133
17
62
67
18
31
31
OVER 18
8
8
1451
ADOLESCENTS ATTENDING
AND NOT ATTENDING SCHOOL
ATTENDING
NOT ATTENDING
14
248
152
400
15
174
225
399
16
133
260
393
17
67
325
392
1584
PETERBOROUGH SURVEY
CHART NO. 1.

These calculations allow the departures from the community to be cancelled by the new arrivals, but do not allow for any excess of either departures or new arrivals. If the population of Peterborough increases considerably during the next two years, allowance should be made for such increase.

B.

Employment in Peterborough.

1. Information was secured from 47 industrial establishments and five departmental stores. The 5,420 employees of these firms have been classified into groups, representing 84 different kinds of work or jobs. The classification of employees as given by the firms is the basis of this grouping. In some cases jobs very much alike have been grouped under one designation. The numbers given represent those employed at the time of the survey. The actual number employed will fluctuate from time to time according to the demands for production and the availability of suitable labour.

2. *General Classification of Employees. See Chart No. 2.*

Note the relatively large number employed in metal working, electrical work, and draughting, textile work, commercial and clerical work, flour and food production, and in wood-working. Special consideration should be given to the relation of these to the services which a vocational school can render.

3. *Employment of Women and Girls. See Chart No. 3.*

Note the limitations of the employment of women and girls as compared with those of men and boys. These limitations apply not only to the variety of employment, but also to the upper limits of advancement while employed. Note the relatively large number employed in textile work, in making electrical equipment, in bookkeeping, stenography and general clerical work, in garment making, including millinery and dressmaking, and in retail selling. It is well to keep in mind also that in the case of the girls it is necessary to provide training not only for their more or less temporary wage-earning jobs, but also for their future activities as home-makers. While a vocational school can render valuable service in preparing girls for wage-earning, its most valuable service will be the training which it can give to help them in home-making activities.

4. *Employment of Adolescents. See Chart No. 4.*

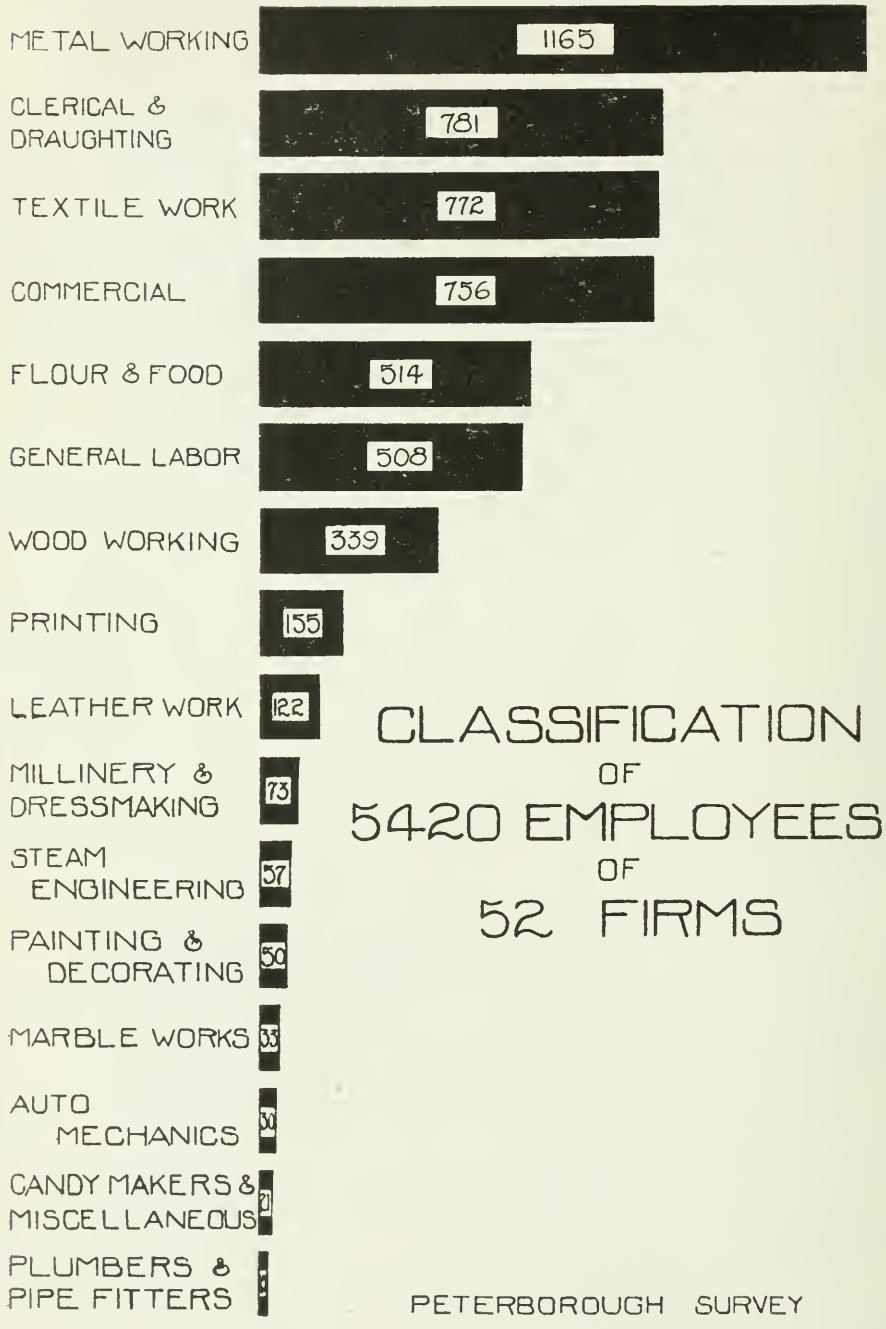
NOTES:—*a.* Of the 377 adolescents 14-16 years of age not attending school, 206 are employed as indicated on the chart. This leaves 171 who are either at home or employed in retail business or in connection with other lines of business and professional work.

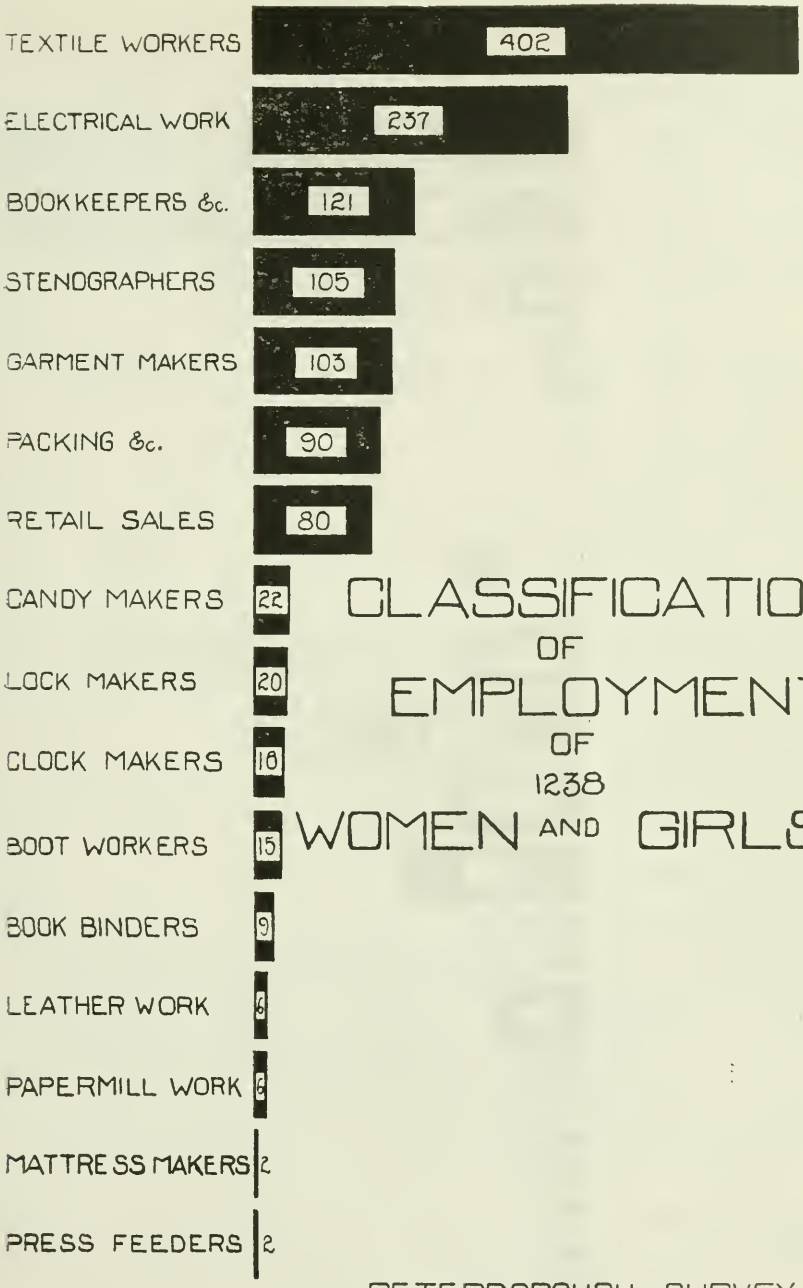
b. Of the 585 adolescents 16-18 years of age not attending school, 417 are employed as indicated on the chart. This leaves 168 who are either at home or otherwise employed.

c. Of the 962 adolescents 14-18 years of age not attending school, 623 are employed, as indicated on the chart. This leaves 339 who are either at home or otherwise employed.

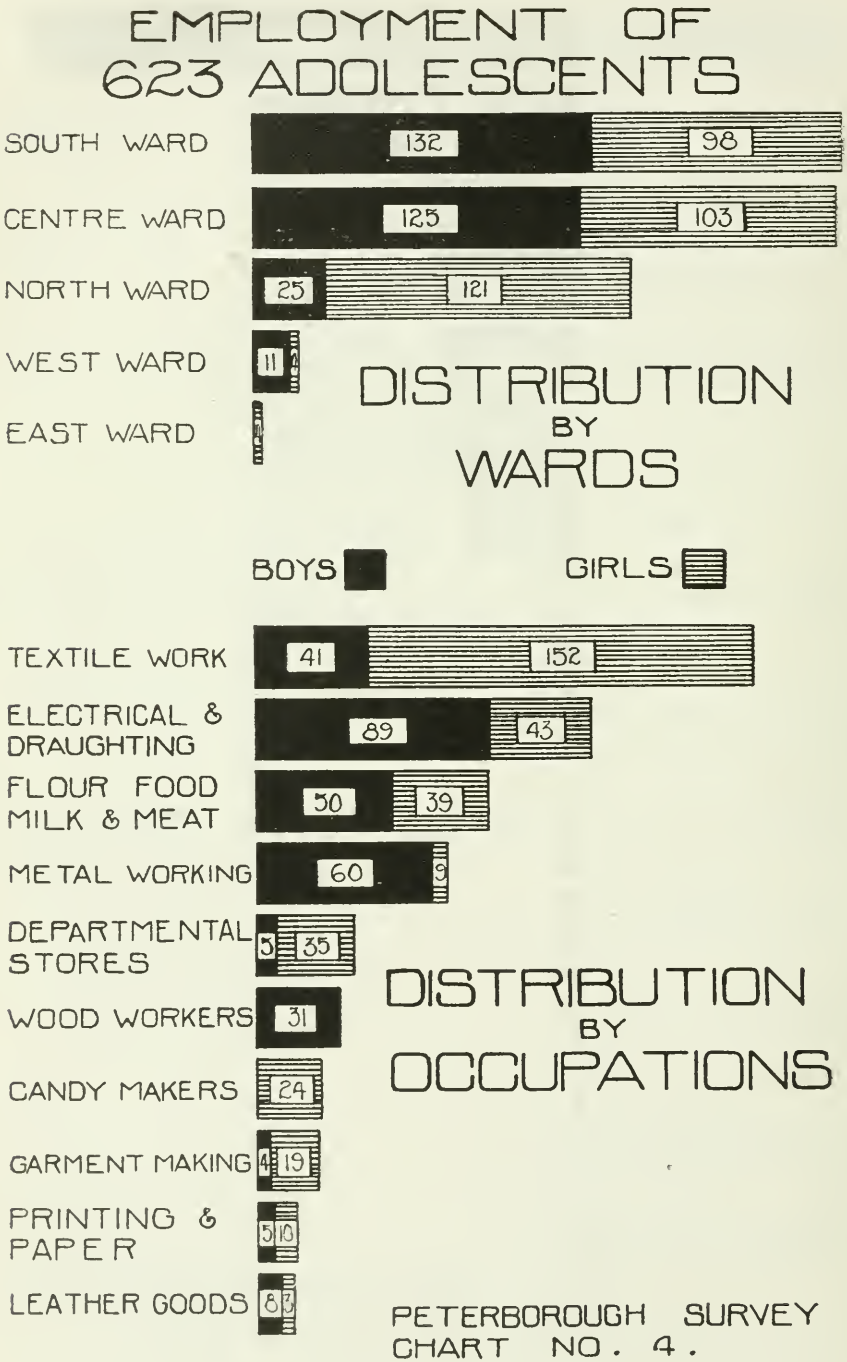
d. The majority of the 339 adolescents will be either at home or employed as office help, sales persons, and in messenger and delivery service for the firms listed in paragraph 5 which follows.

e. The distribution of employed adolescents by wards has a bearing on the question of determining the most suitable location of the school from the point of view of the part-time classes.


METAL WORKING
1165
CLERICAL & DRAUGHTING
781
TEXTILE WORK
772
COMMERCIAL
756
FLOUR & FOOD
514
GENERAL LABOR
508
WOOD WORKING
339
PRINTING
155
LEATHER WORK
122
MILLINERY & DRESSMAKING
73
STEAM ENGINEERING
57
PAINTING & DECORATING
50
MARBLE WORKS
33
AUTO MECHANICS
30
CANDY MAKERS & MISCELLANEOUS
21
PLUMBERS & PIPE FITTERS
CLASSIFICATION
OF
5420 EMPLOYEES
OF
52 FIRMS
PETERBOROUGH SURVEY
CHART NO. 2.



PETERBOROUGH SURVEY
CHART NO. 3.


EMPLOYMENT OF
623 ADOLESCENTS
SOUTH WARD
132
98
CENTRE WARD
125
103
NORTH WARD
25
121
WEST WARD
11
EAST WARD
DISTRIBUTION
BY
WARDS
BOYS
GIRLS
TEXTILE WORK
41
152
ELECTRICAL &
DRAUGHTING
89
43
FLOUR FOOD
MILK & MEAT
50
39
METAL WORKING
60
9
DEPARTMENTAL
STORES
3
35
WOOD WORKERS
31
CANDY MAKERS
24
GARMENT MAKING
4
19
PRINTING &
PAPER
5
10
LEATHER GOODS
8
3
DISTRIBUTION
BY
OCCUPATIONS
PETERBOROUGH SURVEY
CHART NO. 4.

f. The distribution of employed adolescents according to the kinds of work has a bearing on decisions regarding the nature of the instruction and training to be given to part-time classes.

5. *Other Employment Opportunities. See Chart No. 5.*

In addition to the employment opportunities represented in the preceding sections, there is practically the whole field of retail business, professional work, miscellaneous trades and personal service to be considered. It was impossible in the time available to visit more than a few of each of the firms engaged in retail business and special trades. From the classified directory we have obtained the distributions indicated on the chart.

The relation of the commercial firms to the services which a commercial department of the vocational school can render should receive careful consideration. The relation of the special trades to the courses for boys in the day and evening classes will be apparent.

C.

Distribution of Population.

The distribution of the population as to residence, places of work, and lines of communication has a direct bearing on the question of determining a suitable site for a school that is planned to serve the community as a whole. The ward distribution of places of work for employed adolescents—*See Chart No.* 4—has a significant relation to the question of making the most convenient and suitable arrangements for part-time instruction under the provisions of the Industrial Education Act. A careful study of the map at the end of the report, should be made when considering the question of a site for the vocational school.

SECTION III.

The Questions Answered

I. Is the need for vocational education in Peterborough sufficient to justify the establishment of a Day Vocational School under the Industrial Education Act?

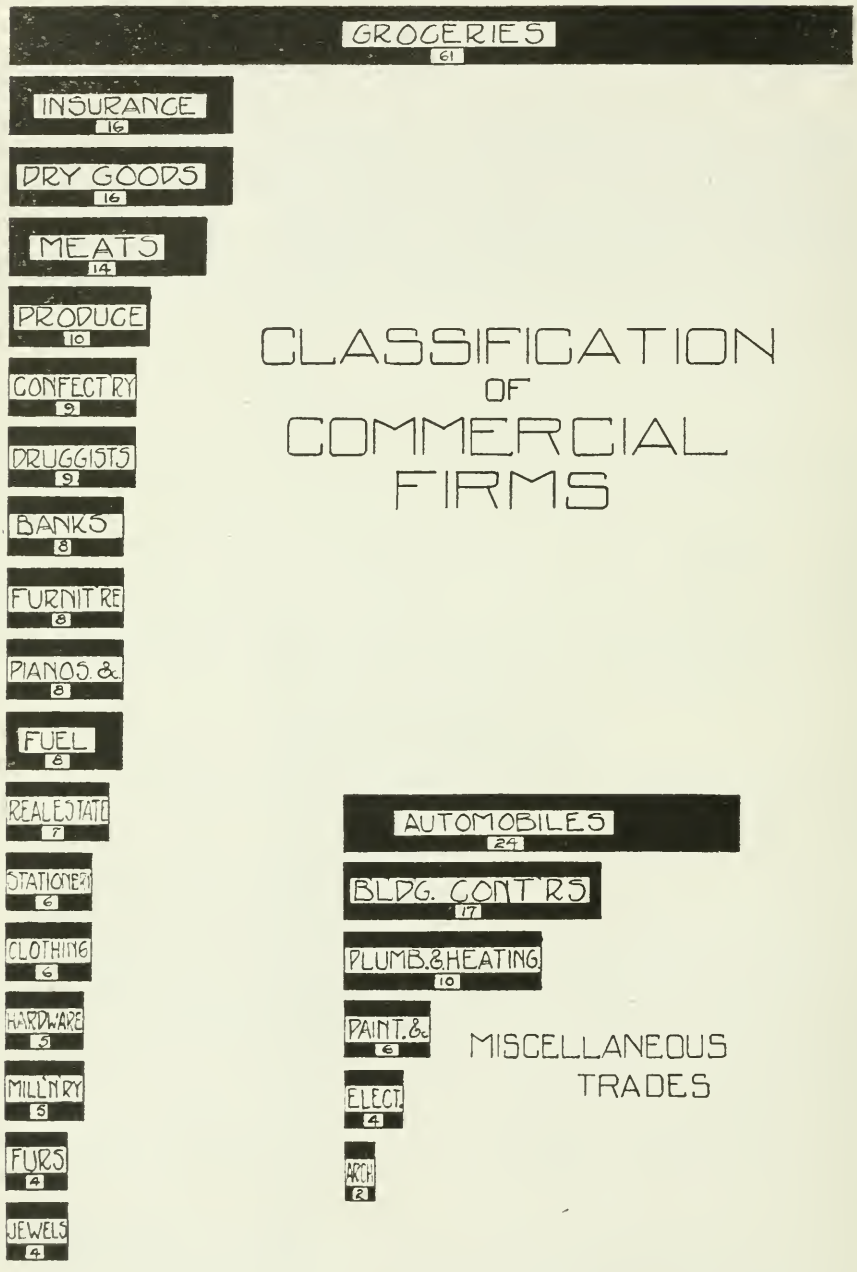
Answer.—In the light of the facts revealed in the preceding sections, it is clear that the answer to this question must be in the affirmative. Such provision is a real necessity if the following educational needs are to be met:

a. The need of giving to boys and girls who are to enter industrial, commercial and home-making activities, and who are able to attend a secondary school full time for from one to four years, as satisfactory a preparation for citizenship and for their future vocations as is now provided for those looking forward to professional service.

b. The need of providing for boys and girls, who find it necessary to enter industrial, commercial and home-making activities as soon as they are fourteen years of age or later during their adolescent years, the most suitable part-time instruction and training in accordance with the requirements of the Adolescent School Attendance Act.

c. The need of reducing, as far as possible, the present waste of time and effort of young employees and of their employers due to the absence of effective vocational counselling and of a satisfactory apprenticeship system.

d. The need for a more extended programme of evening and special day vocational classes and for more suitable and adequate accommodation and equipment for such classes. Experience elsewhere shows that the establishment of day vocational schools increases rather than decreases the numbers attending evening classes.



PETERBOROUGH SURVEY
CHART NO. 5.

e. The facts revealed in Section II A show that the number of adolescents who may be expected to receive service from such a school is sufficient to assure a substantial and permanent group of full and part-time day students.

f. The enrolment in the evening classes in Peterborough during the past few years indicates only the minimum of what may be expected if a vocational school is established.

g. The variety of industrial and commercial activity in Peterborough—Section II B—gives a substantial basis of local employment for the majority of the graduates of a vocational school. Suitable preparation for these employment opportunities will tend to reserve for Peterborough's boys and girls the best employment opportunities of their home city. Because of the nature and variety of work involved, this preparation, while favouring local needs, will not limit the opportunities of the graduates to Peterborough.

h. The economic significance of the adolescent group in a community and its direct contribution to industry and commercial life may be more fully realized by giving due consideration to the fact that the 1,000 (in round numbers) employed adolescents in Peterborough earning on an average of about $500 a year represents an annual pay roll of $500,000. Indirectly, and it may be in some instances directly, these boys and girls are doing their bit in supporting financially the institutions and public services of the community.

II. If established, what should be the range of work undertaken by such a school?

Answer.—*A.* As to Courses of Instruction.,

1. Full-time, Part-time and Evening Commercial Courses.
2. Full-time, Part-time and Evening Industrial and Home-making Courses for Girls and Women.
3. Full-time, Part-time and Evening Industrial and Technical Courses for Boys and Men.
4. Special Day Courses for Nurses, Home-makers and others whose needs will be served better by such classes than by evening classes.
5. Special Full-time Courses for over-age (*i.e.*, over 14 years of age) boys and girls in the lower forms of the Elementary Schools.

B. Vocational Courses. Note the relation of these to the question of Accommodation and Equipment.

While it is not intended that this Report should attempt to go into the detailed planning of the above-mentioned courses, it is well to have recorded here the fact that the survey revealed the need for instruction and training along the following lines:

1. Mathematics, as applied to the trades and industries.
2. Blue-print Reading, as needed by many of the trades and industries.
3. Mechanical Drawing, Machine Design and Advanced Draughting.
4. Accounting, Book-keeping, Stenography, Salesmanship and Secretarial Work.
5. Machine Shop Practice and Tool-making.
6. Electrical Work—Wiring, Power Station, Power Transmission, Electrical Equipment.
7. Industrial Studies: Raw Materials, Processes and Products in the Textile, Electrical, Metal-working, Wood-working, Cereal Products and Meat Products Industries.

8. Wood-working, including Carpentry, Cabinet-making and Canoe-building.
9. Power Sewing Machine Operation, Garment Cutting and Making.
10. Dressmaking and Millinery.
11. Automobile Mechanics and Welding.
12. Applied Mechanics, Physics and Chemistry.
13. Pattern-making and at least the principles of Moulding.
14. Show Card Writing and Sign Painting.
15. Theory of Textiles, including Design.
16. Stationary Steam Engineering.
17. Dietetics, Chemistry of Foods, Invalid Cookery for Nurses in Training.
18. Home-making, Home Nursing, Cooking.

NOTE:—It will be apparent that the Evening, and, to a large extent, the Part-time Courses will be determined by these needs and that from the most basic and extensive of these needs the vocational parts of the Full-time Day Courses will be selected.

C. General Courses.

In all the Full-time Day Courses and to the extent needed in Part-time Day Courses, provision must be made for instruction in English, in Mathematics, in Science, in Social Studies, and in Physical Training. All will recognize the necessity of providing for all boys and girls during their adolescent years a basic preparation for intelligent and effective participation in civic and social life, as well as in their chosen vocations.

III. What accommodation should be provided and within what general area should such a school be located?

Answer.—*A.*—As to accommodation.

General.

1. Office for Principal and Advisory Committees.
2. Library suitable for study purposes as well as book storage.
3. Assembly Hall and Gymnasium—one unit for both purposes, or two independent units, whichever be preferred.
4. Teachers' Rooms.—One small room for male teachers, with toilet adjacent. One small room for female teachers, with toilet adjacent.
5. Toilet Rooms for male and for female students.
6. Heating and Ventilating Unit.
7. Lighting for Evening Class purposes in all rooms.

Shops and Laboratories.

1. Wood-working Shop—cabinet, carpentry, pattern, canoe.
2. Machine Shop, for general machine shop practice and automobile mechnaics.
3. Electrical Workshop.
4. Physics and Industrial Laboratory.
5. Chemical Laboratory.
6. Dressmaking and Millinery.
7. Cooking Kitchen.
8. Dining-room, Kitchenette and Bedroom.
9. Draughting Room.
10. Freehand Drawing, Mechanical Drawing and Art.
11. Typewriting Room.

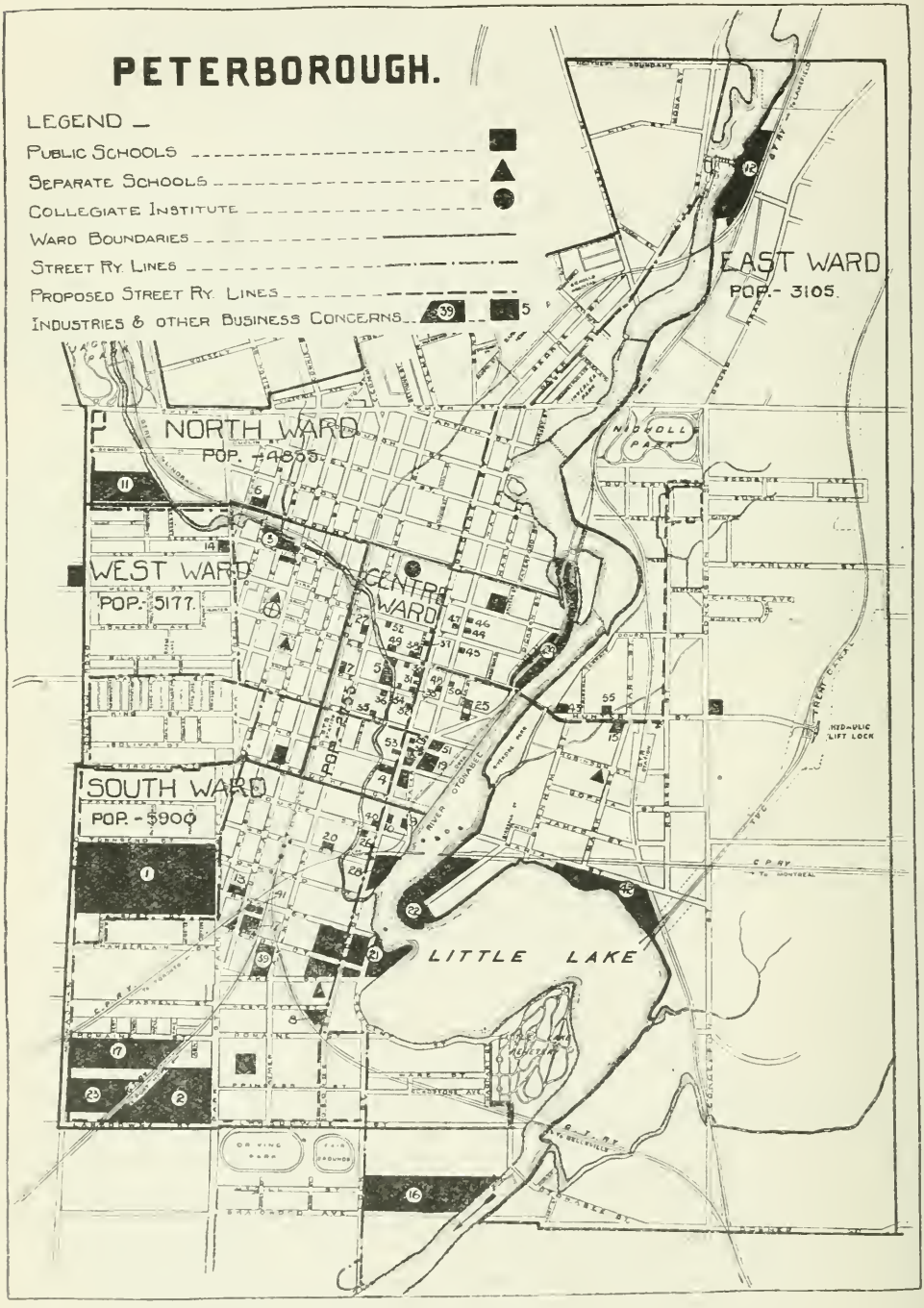
Class Rooms.

4 class rooms for Commercial Department.
1 office for Commercial Department and Office Practice.
2 class rooms for Full-time Day Students—boys.
2 class rooms for Full-time Day Students—girls.
1 class room for Part-time Day Students—girls.
1 class room for Part-time Day Students—boys.

It is not possible to indicate the cost of such a building under present conditions without preparing plans and specifications and securing tenders or estimates by building experts. The unit suggested should care for the needs of about 300 full-time day students—including commercial—and about 400 part-time day students. An evening class enrolment of 500 or more could be cared for by a suitable distribution of classes during the week. The building should be planned so that either or both the class-room space and the shop or laboratory space can be extended without the necessity of altering the first building unit.

B. As to Location.

Answer.—It is not within the province of this report to recommend any particular site for such a school. From the standpoint of service to the greatest number, with a minimum of inconvenience, it should be located within a block or two of a main car-line in Centre Ward or near the Eastern or Southeastern part of the West Ward. Within these limits the question of cost and of sufficient grounds should be the determining factors. (*See map on following page.*)


PETERBOROUGH.
LEGEND —
PUBLIC SCHOOLS
SEPARATE SCHOOLS
COLLEGIATE INSTITUTE
WARD BOUNDARIES
STREET RY. LINES
PROPOSED STREET RY. LINES
INDUSTRIES & OTHER BUSINESS CONCERNS
NORTH WARD
POP. - 4855
WEST WARD
POP. - 5177
CENTRE WARD
SOUTH WARD
POP. - 5900
EAST WARD
POP. - 3105
LITTLE LAKE
MIDDLE LOCK
HYDRAULIC LIFT LOCK
C P RY
TO MONTREAL
G T R
TO BELLEVILLE

APPENDIX C

REPORTS OF THE INSPECTORS OF CONTINUATION SCHOOLS

I. REPORT OF INSPECTOR MILLS

To the Honourable R. H. Grant, M.P.P.
Minister of Education for Ontario.

Sir,—I have the honour to submit the following report on the Continuation Schools under my supervision for the academic year 1919-1920.

I have the honour to be, Sir,

Your obedient servant,

G. K. Mills.

Toronto, December 31st, 1920.

My division of the province during the past year includes all territory between Toronto and Cochrane, north and south, and between Sault Ste. Marie on the west and the eastern boundaries of the province. In this territory there are seventy-one Continuation Schools in operation. These are classified as follows:

Grade A Schools (having the full time of three teachers)	..
Grade B Schools (having the full time of two teachers but less than the full time of three)	48
Grade C Schools (i) (having the full time of one teacher but less than the full time of two)	8
Grade C Schools (ii) (having the full time of one teacher)	15
Total	71

New schools have been opened at Marmora and Minden. The school at Sturgeon Falls is now Grade B. An additional teacher to do half-time work in the Continuation School has been added to the staff at Lansdowne, Manotick and Agincourt. The school on Wolfe Island has not been open for two years owing to the inability of the Board to secure a teacher. Early in July the School Boards of Bobcaygeon and Iroquois Falls made application for, and received the approval of the Minister to the establishment of Continuation Schools, but for some reason the necessary steps to carry on the work were not taken.

The Teachers

Year after year the number of male teachers decreases. In all there are 128 teachers in these schools, of whom 31, or less than 25 per cent., are men. While this is a higher proportion of men than is to be found in Public Schools, it is much lower than in High Schools and Collegiates. It is not to be expected that these

small schools will attract and hold capable, energetic and ambitious young men. Because of the wholly inadequate salaries offered and lack of any prospect of promotion such men find their way into the High Schools or Collegiates or out of the profession entirely. Of the 128 teachers nine men and nineteen women hold degrees from some University and many have High School Assistants', as well as first-class certificates.

Salaries of Teachers

During the past year there has been a decided scarcity of teachers, which seems to be increasing notwithstanding the marked increase in salaries offered. Boards that last year paid $1,200 and $1,000 to women teachers, are paying this year $1,500 and $1,200. While some Boards seem to regard this increase as an extravagant demand on the part of the teachers and talk of it as a "hold up," others with a better knowledge of conditions or a fairer sense of justice express surprise that teachers can be engaged at these figures. I have seen an energetic, capable young man acting as Principal of a Continuation School at $1,300 per annum while a very poor type of labourer on the provincial highway nearby was receiving $5 per day.

In the past, despite very meagre salaries, it has been possible to keep up a constant stream of young men and women who have been willing to undertake the work and expense of preparing themselves to teach school for a few years, since it offered a respectable livelihood while preparations were being made to enter some profession or business. Usually such men and women were young and had little professional preparation, but they had native ability above the average, willingness to work and a desire to succeed that went far to make up for lack of skill. The academic preparation necessary lay directly along the road they intended to travel later, and the professional training was very limited and inexpensive. The experience and maturity of mind gained and the rapid development of character were of much more value than the salary earned.

Conditions have changed. Profitable employment can readily be secured. There is little of the exhausting physical labour and long hours of the past. The wages offered, the short hours, the freedom from restraint either at home or in school, the possession of money necessary to seek pleasure and entertainment, all tend to induce youths to leave school at an early age. Compared with this, the long years made up of monotonous days and nights of steady application to work, the mental labour, the confinement, the restraint, the dependence on others, offer little attraction to active youth. The John Adams of the present day who leaves Latin for ditching does not come back to school. Instead, he gets an eight-hour-a-day job tending a machine, possibly the ditcher, at a wage that makes his teacher envious. The conditions regarding employment of girls are quite as favourable. While these conditions may not continue at the same level as during the past few years, it is quite certain that young men and young women in the future will have many opportunities for profitable employment in mental, as well as in physical occupations that were not open to the youth of a few years ago.

Besides this, the expense of preparation for teaching has greatly increased, and if we are to prepare our teachers to serve the needs of the localities in which our secondary schools are located, we must give them an education and a training that will not lie along the road to professional life to the same extent as in the past. Our secondary schools must not any longer be the monopoly of those who choose to enter professional life. They must be made to serve the needs of that large

body of young men and women who have left school for various reasons before reaching the standard of Entrance examinations as well as those who do reach that standard. In order to do this our teachers must receive an academic and a professional training that will enable them to meet the needs of those to be served by these schools.

Because of the numerous opportunities for profitable employment in the cities and large towns and of the advantages offered by well equipped and fully officered secondary schools, providing courses leading directly to all kinds of professional and industrial occupations, it is becoming more and more necessary to rely upon the secondary schools in rural centres, villages and small towns for a sufficient body of young men and women to replace the annual wastage of teachers. Many of these have that acquaintance with rural conditions that is essential for efficient service in the small secondary schools of rural districts, but it is useless to expect them to spend from seven to ten years in getting an education and training necessary to begin the work, additional years of practice, reading, study and attendance at summer courses and then to hope to retain their services at present salaries. Men and women of unusually high native ability and with years of education and training are demanded and the salary offered is very frequently below that demanded by unskilled labour. Only when the salaries offered reach a point when a man may maintain a family on a standard of living at least as high as the average in the community and under conditions that conduce to self-respect and confidence in the future will the teaching profession recruit itself.

Improved Financial Conditions

The most outstanding event of the past year in connection with the Continuation Schools has been the legislation of the last session, whereby the financial support is very greatly improved in three important ways:

(1) The Legislative Grants have been increased about fifty per cent, and as a consequence the County Grants will be similarly increased.

(2) Counties must pay the total cost of maintenance of county pupils attending Continuation Schools as has heretofore been done in the case of pupils attending High Schools.

(3) Adjacent counties must pay sixty-five per cent. of the cost of maintenance of pupils from these counties who attend Continuation Schools in other counties. This has heretofore been done in the case of similar pupils attending High Schools.

Continuation Schools now have an apparent financial advantage over High Schools inasmuch as the Legislative grants are relatively larger, but as these schools are usually located in school sections or small villages where the assessment is small, the cost of maintenance to the ratepayers is usually as great as in municipalities that support High Schools.

Present Tendencies

Three factors have combined to bring about a general increase in teachers' salaries during the past year. These have been the marked scarcity of teachers, the movement towards a federation of teachers and the better provision for financial support of the schools. Notwithstanding the increased salaries there are fewer students in our training schools than formerly. As a consequence salaries must increase until they are large enough to induce young men and women to take up teaching as a life work.

Another effect of the better financial support may be seen in the unusually large number of schools established during the past year. A better spirit of co-operation for the purpose of maintaining these schools is apparent. Adjoining school sections are uniting with each other to establish a school, starting usually with one teacher and doing Lower School work only. Several such Union Schools have already been established and more than the usual number of requests for information are being received. If provision were made whereby the cost of the building could be fairly apportioned among those municipalities benefited, there is very little doubt but the number of these schools would rapidly increase.

This increased financial assistance has had one effect that is not good. Heretofore when the attendance at a Continuation School reached a point where a third teacher became a necessity it was in the interest of the school financially to become a High School, as the County had to pay the total cost of maintenance of County pupils attending a High School but not of those attending a Continuation School. Under present conditions High Schools and Continuation Schools have the same claim on the County for maintenance of County pupils and as the Legislative grant to Continuation Schools is somewhat larger than to High Schools, there is no inducement for the larger schools to become High Schools. If they remain as they are the Boards may appoint teachers with lower qualifications and therefore at lower salaries. As a result very few Boards will seek to convert the school into a High School and the incentive to a healthy progressive growth in that direction is gone. It would, in my opinion, be well to encourage the development of these and smaller schools along other lines such as some forms of industrial or agricultural work for the boys and of Household Science for girls.

Conditions That Require Remedy

1. Cost of Building

In the majority of communities in which these schools are located it has been necessary to erect new buildings or additions to old ones in order to provide the necessary classroom accommodation. The total cost of building and furnishing is borne by the school section or village in which the school is located. The attendance at many of these schools has increased very rapidly during the past two years, and it is now necessary to provide additional classroom accommodation and teaching staff. The overcrowding in most cases is due to the increased attendance of county pupils, and yet no portion of the cost of the building is borne by the county or by the township. Many of our schools need more classroom accommodation, but as the Act is at present the Inspector feels that it is a hardship to require the school section or small village to undertake the whole cost of building.

When secondary schools were confined to the larger centres this unfairness was not so apparent, but as these schools become established in smaller places the cost of the building becomes a great burden. At present it is the chief obstacle to the rapid extension of these schools. Very many communities are deprived of all opportunity for secondary school education of any kind because, to establish such would mean additional classroom accommodation, and while the ratepayers in the section might be willing to shoulder a fair share of the cost, it is not easy to persuade them that they should provide a school building free for pupils who come from outside the section. Some means should be found that will divide the cost fairly among the municipalities that benefit by the school.

II. Extension of Service

I have dealt with this topic so frequently in my annual reports that I would keep away from it if I were not convinced that it is the most important and at the same time the most difficult educational problem of the present day. The necessity for making every effort to extend the work of our secondary schools so as to serve the needs of the great body of youth who for various reasons have left school before reaching the standard of Entrance examination, who have no notion of entering any profession but expect to follow some form of agricultural occupation; the importance of such service, both for the State and the individual; the simple act of fairness contained in such an effort, inasmuch as it is an attempt to permit every child to share in public money expended for secondary education, so that he may, to some degree, develop the abilities he possesses and live the life he chooses with greater happiness for himslf, benefit to the community, and profit to the State than would otherwise be possible; all combine to make the problem one of first importance. The financial difficulties, the necessity for increased classroom accommodation, the scarcity of suitable teachers, and the influence of traditional ideas regarding education make a satisfactory solution of the problem very difficult and one that requires the utmost wisdom and patience.

Within very recent years, earnest efforts have been made with gratifying success, to serve the needs of similar youths in cities and large towns by means of technical schools, commercial schools, mining schools, textile schools, day and evening industrial classes and in other ways. It is true that the problem in large centres is much simpler than in rural districts, because a large body of public opinion actively supports the efforts of those engaged in the work. The artisans from European countries have had experience in such schools and the problem of gathering the young people to suitable centres needs no consideration. In spite of the difficulties to be faced, there is no doubt that in this, as in all other problems, a clear conception of the need will open a way to the solution. Whether it is done by the regularly qualified resident teachers of the school staff, or by teachers employed to go from school to school on the circuit plan, or by practical men on farms who may have spent some time at the Agricultural College, or by a combination of plans, is a matter of detail. It is quite probable that all plans will be found needful and helpful, and that for many years to come no one plan should be adopted to the exclusion of others.

In my opinion the direction of this extension of service should be along the following lines:

1. Winter schools for young people, without any fixed standard of Entrance.
2. A department of Agriculture and Farm Mechanics.
3. A department of Household Science.
4. Provision for courses of lectures on subjects desired by the community and approved by the Department.
5. The development of the aptitudes and tastes of the young people both of the winter school and the regular school through efficient operation of debating, literary, musical and art societies.

II. REPORT OF INSPECTOR HOAG

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I beg to submit for your consideration a brief report on the general condition of the Continuation Schools which have been under my supervision for the year 1919-20.

I have the honour to be, Sir,

Your obedient servant,

J. P. Hoag.

Toronto, January 4th, 1921.

Schools and Teachers

During the year 1919-20, I have had inspectoral supervision of those Continuation Schools situated in the western peninsula of Ontario, between Georgian Bay and Lake Erie, and along the main line of the Canadian Pacific Railway from Sudbury to Keewatin. The schools in this inspectoral district may be described as follows:

No. of Schools.	Description.	No. of Teachers.
11	Each employing 1 teacher	11
4	Each employing 1 full time and 1 half time teacher	8
55	Each employing two teachers	110
5	Each employing 2 full time teachers and 1 part time teacher	15
A total of 75 schools and		144 teachers

Inspectoral Visits

Under the regulations of the Department of Education, it is necessary to spend one day of inspection for each teacher on the staff of a school. In many cases, local conditions or changes in staffs may make it necessary to visit a school a second, or even a third time during the year. During the past year it has been found necessary to visit a number of places to discuss with trustees and ratepayers the question of establishing new Continuation Schools. As many of the Continuation Schools are situated on branch lines of railway or at some distance from a railway, it is easily seen that the time of a Continuation School Inspector is pretty fully occupied.

I am pleased to be able to report that I have been able to visit each school during the school year and to make additional visits where this was found necessary.

In my visits of inspection, I have very often been accompanied by the local Public School Inspector. It is my duty and privilege to acknowledge the great assistance I have received from the local Inspectors, whose knowledge of local conditions is necessarily far greater than mine. Indeed I feel sure that the active sympathy of the Public School Inspectors has been one of the main factors making for the success of the Continuation School movement. In almost every case where a new Continuation School is established, it is the local Inspector who takes the initiative in opening the question, and when the Continuation School Inspector visits the locality concerned, it is the local Inspector to whom he turns for advice and assistance.

New Schools

The year 1920 has been marked by the increased interest shown in Continuation Schools throughout the rural districts. Five new schools, Ailsa Craig, Lobo, Aberfoyle, Morriston and Bolton, have been opened, and one school, Feversham, which for some years has been closed, has reopened. Several schools have added a teacher to their staffs. On the whole, the Continuation Schools have increased in number and in teaching strength during the year.

Several places such as Wheatley, Dorchester, Embro, etc., have begun a movement to organize Continuation Schools, and many inquiries have been received from other places as to conditions and financial support.

Co-operation

In connection with the recent movement toward extension of the Continuation School idea, it is interesting to note that co-operation is the keynote. Several sections unite to maintain a Continuation School. While the idea of union for this purpose is not new, since places like St. George and Ayr have had union for Continuation School purposes for some years, yet the year 1920 has been notable for the coming of the idea of union into fuller strength. In Middlesex County, for instance, Mt. Brydges Continuation School is supported by a union of five school sections; Lobo by a union of six sections, and Dorchester is proposing to open in 1921 with a union of five sections.

It is gratifying to find that where union has once been established, there has always been success. At St. George, in Brant County, when the last term of agreement for union expired, not only did all the original school sections agree to a renewal for a further period of five years, but another neighbouring section asked to be admitted and was admitted to the union. And this in face of the fact that St. George Continuation School is facing a building programme.

Consolidation

It is, as yet, too early to say what effect Consolidation of Schools may have upon the Continuation School movement, but I feel sure that in most cases, wherever consolidation is effected a Continuation School will be established. Indeed, I find that when public meetings are held to discuss the question of consolidation, the strongest argument in favour of such consolidation is that it will provide an opportunity to give pupils secondary education with a home and rural environment. As consolidation spreads the number of Continuation Schools will increase. But in many cases where consolidation is not, as yet, possible, a union of school boards may establish a Continuation School.

School Work

With the character of the courses of study provided in our schools, I shall not deal, as the whole question of secondary school work is being considered by a very representative committee appointed for that purpose. But with the character of the work done in our schools, I am highly pleased. Teachers and pupils are alike earnest and studious, and as the outside distractions are not so great in smaller places as in cities and towns, great attention is given to mastering the courses presented. I feel that good work is being done.

Scarcity of Teachers

There is, however, a great scarcity of properly qualified teachers. As a result of this, there are in my inspectorate a greater number of teachers holding temporary certificates of qualification than there has been for some time in the past. This scarcity is caused to a large extent by the fact that the High Schools have been attracting many of our teachers, on account of the larger salaries these schools were prepared to pay, and also on account of the fact that the number of subjects which a teacher in a High School has to teach is smaller than the number the teacher must teach in a Continuation School.

Art

In many schools I find that the work in Art is not satisfactory. This is due in some degree to the fact that many teachers are not well qualified to teach Art. It is, however, due also to some extent to the fact that many parents and trustees and most of the boys look upon the Art work as of little use. Indeed, some Boards have asked if they might not substitute simple commercial work and drawing for the colour work in Art. In the large High Schools and Collegiate Institutes it is possible to teach both Art and Commercial Work, but in a two-teacher Continuation School this is impossible as the time of the teachers is fully taken up with compulsory subjects of which Art is one.

It would appear that a certain amount of elasticity in the choice of such subjects as Art, Agriculture and Horticulture, and Commercial Work might be permitted so that School Boards having control of two and three-teacher schools might, with the approval of the Inspector, select the subject most suited to the youth of the community. Thus one school might teach Art: another, Agriculture and Horticulture: and another Commercial Work. I feel assured that as much use and cultural value may be found in any one of these subjects as in any other but is is clearly impossible for a small school to provide for all of them. Too much attention has, I feel, been given to Art in the past.

APPENDIX D

REPORTS OF THE INSPECTORS OF HIGH SCHOOLS

I. REPORT OF INSPECTOR HOUSTON

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I beg to submit for your consideration a brief report on the general condition of the Collegiate Institutes, High Schools, and private institutions which were under my supervision during the academic year 1919-20.

I have the honour to be, Sir,

Your obedient servant,

Toronto, December, 1920. J. A. Houston.

During the year I visited the following schools:—

Collegiate Institutes.—Brantford, Chatham, Galt, Ingersoll, Kitchener, London, St. Mary's, St. Thomas, Sarnia, Stratford, Strathroy, Toronto (Harbord, Humberside, Jarvis, Riverdale, Malvern, Oakwood, Parkdale), Windsor, Woodstock —total twenty.

High Schools.—Amherstburg, Aurora, Aylmer, Dutton, Essex, Forest, Georgetown, Glencoe, Hagersville, Lucan, Leamington, Newmarket, Oakville, Paris, Parkhill, Petrolia, Port Dover, Port Rowan, Simcoe, Streetsville, Ridgetown, North Toronto, Tillsonburg, Vienna, Wardsville, Waterford, Watford, and Wallaceburg—total twenty-eight.

Private Schools.—The Ursuline Convent, Chatham: The Loretto Convent, Stratford; St. Anne's Convent, Kitchener; Loretto Abbey, Toronto; Loretto Day School, Toronto; St. Angela's College, London: Bishop Strachan School, Toronto; Alma College, St. Thomas; St. Mary's Academy, Windsor—total nine.

I had visited each of the above schools during the academic year 1918-19, so that I was already in touch with existing conditions in each. This made my inspection in many cases a visit of pleasure as well as of duty, enabling me to see the progress which had been made in accommodation, or in academic work. I do not purpose, in present report, to give statistical tables in this connection as they would not serve any useful purpose and would be largely a repetition of last year's figures.

Accommodations

In my last report I made reference to the general increase in attendance in the majority of the schools, and the consequent necessity for providing more class-room and other accommodation. During the past year this increase in attendance has become even more marked, but I regret to say that the additional accommodation is not yet in evidence. There is a very general policy of postponing any expenditure for such purpose, in the hope that the cost of building may come down, and in many towns and cities the schools are suffering as a result.

In Toronto, more class-rooms are being provided in Parkdale, Malvern and North Toronto, while the opening of the new Davenport High School has some-

what relieved the situation at Oakwood and Harbord. There is still urgent need for more class-rooms.

Brantford, St. Thomas, Kitchener, Galt and other places are marking time, and making temporary provision for their work in basements, assembly rooms, libraries, etc., and meantime are pursuing a policy of "watchful waiting."

London Collegiate was destroyed by fire during the year, with the result that the Commercial Department has been transferred to the Technical Building, and the rest of the school temporarily housed wherever a place could be found. It is to be hoped that the London Board will soon come to a definite decision as to the policy of extension which will best serve this most important educational centre.

Many of the smaller towns are also facing the question of more room for the schools, and are adopting all kinds of expedients to meet immediate demands in hope that conditions may in some way become more favourable.

The general situation will not be improved by the coming into force of the Adolescent Attendance Act, and I anticipate a very serious condition of affairs when work begins next September. I shall be very much surprised if one half of the secondary schools do not find themselves unable to provide the accommodation required by those seeking admission.

Reading, Writing and Spelling

In my report of last year I submitted figures showing the gradings given in the above subjects through a series of tests applied in all the schools I had visited during the year. Similar tests have been regularly and systematically given during the year just completed; these tests show a higher grading in reading and writing (especially in the latter) while the results in spelling remain much the same. Experience and observation prove conclusively that, when these subjects receive special attention in connection with all the subjects of the school course, results are generally satisfactory; when they are treated as separate units, results are not so good. The best method of dealing with these essentials of a good education is to consider them as an integral part of every course studied, not as courses in themselves, and to plan the work accordingly. The weight of evidence is entirely in favour of this method of treatment as producing excellent results.

Correlation of Subjects

For many years educationists have accepted the theory that best results are obtained when the work in any particular subject is carried on by the same teacher throughout a pupil's entire school course. The main argument in favour of this idea is that a teacher is building on foundations laid by himself, and that there is therefore no loss of time on the part of either teacher or pupil, the work goes on continuously from year to year. If by a subject, one means English, or science, or mathematics, I have no fault to find with the theory, but in actual practice things do not work out in that way. Instead of one teacher having the English in a class, it is not unusual to find one teacher taking literature, another composition, another history or geography, still another grammar or reading, so that four or five are having a share in what is really but one subject. This condition necessarily leads to considerable over-lapping, lack of correlation, loss of time and teaching power, and lack of that continuity and connection which might be expected if these branches of the subject were more largely in the hands of one teacher. The connection between literature and reading, reading and grammar, composition and history, history and geography is so close, and the relations are so intimate that it seems impossible to work to best advantage if these subjects

are scattered amongst different members of the staff, yet our system of organization has favoured this scheme of division for many years.

When the qualifications of the members of a staff would permit its being done, I would suggest that all the English of any one class should be placed in charge of one teacher; English could then be made what it really is, one subject, not half a dozen. There would be little difficulty in carrying out this plan in the smaller schools; some few of the larger schools have already practically adopted it, with results that have been eminently satisfactory. I know that our Regulations provide that reading, for example, throughout a school should be, if possible, in the hands of one teacher; it is the wisdom of just such a regulation that I am questioning. Might we not expect better results and more interest in the work, if reading were made what it really is, an integral part of literature and grammar?

I have used English to illustrate my suggestion; the same arguments apply, to a greater or lesser extent, to mathematics, science, or classics, though in these branches of study there has not been the same dissipation of energy or lack of correlation as in the English, owing to the fact that the subdivisions of these departments are fewer in number.

Independent Investigation

It is only repeating what every one will acknowledge, to say that educating a child means giving such training as will fit him for future service and citizenship, and does not mean filling his mental pigeon-holes with unrelated, though possibly interesting, facts. The acquisition of knowledge or information is but a small part of one's education; it may enable a candidate to pass successfully an examination test, but it may not make him any stronger to face the problems which will meet him in everyday life. The best service teachers can render to their pupils and to the state is to train those pupils in thinking and acting for themselves, to encourage in them the spirit of investigation which exists in every normal mind, to impress on them that what is worth having is worth working for, and to make their attitude towards life one of self-reliance, not dependence on others. We are doing too much for our pupils that they might very well do for themselves if given the opportunity. Why not train them to use the tools which lie at their hand, train them to use their text-books, give them the library habit, stimulate the idea of original research on their part so that they will not be satisfied merely to memorize notes which have been dictated to them? Such a course of training would produce a strong, independent, self-reliant body of men and women who would be in the future leaders, not followers, in the state, and who would be in the meantime even more successful in their school examinations than those who meekly and willingly submit to the filling-up process. The more we can cultivate the spirit of independent investigation the better will be the finished product sent out from our schools.

Courses of Study

From time to time there have appeared in the public press criticisms of a more or less varied character directed against the courses of study provided in our secondary schools. The general drift of such criticism has been along one of two lines, either that the courses are not sufficiently elastic to allow a pupil latitude in his choice of work, or that the courses are so overloaded that they are more than a pupil can carry with advantage. There may be a considerable element of justice in both criticisms, but the responsibility for the defects complained of has usually been placed on the wrong shoulders. As the whole question of High School Courses is now being considered by a special committee appointed for that purpose, I shall

make no comment except to point out along what lines I should like to see changes made. In this connection it must be remembered that our secondary schools have three duties to perform, and that they cannot get rid of any one of the three: they must (1) provide a broad general education for the average boy or girl, (2) prepare candidates for entrance into the universities, and (3) give the necessary academic training to those who purpose becoming public school teachers.

In any new curriculum which may be adopted, there should be a lessening of the number of subjects made obligatory on all pupils, with a consequent widening in the choice of optional subjects to suit local needs, and at the same time there should be also a lessening of the burden borne by pupils in a limitation of the number of subjects that may be carried on at one time. There should also be a revision of the content of many of the courses to make them possibly more attractive and more suitable to the general needs. Above all, there should be the utmost freedom allowed to Boards and Principals, consistent with governmental control, in framing courses which would meet the needs of different localities and allow the stressing of certain lines of work in certain schools, so that each might function to best advantage in its own place and meet the requirements of its own constituents.

Community Spirit

"The school is made for the people, not the people for the school." I wonder if people really realize this, or if the schools realize it. A school standing apart from the people is losing much of its power and influence. The closer the relationship and the intercourse between school and people, between teachers and parents, the more each is benefited. This co-operation can be brought about in many ways. Home and School Associations, Mothers' School Societies, the use of school halls and schoolrooms as centres of community functions, the general participation of teachers in civic and social activities, close co-ordination amongst church, school and home, all these tend to place the school and its staff where they should be, amongst the most powerful influences for good in the community. The church, the home, the school and the press constitute a quartette of powers which could accomplish almost anything upon which they agreed. A removal of the passive barriers which now exist between church and school, or between school and home will be an advance in the uplift of humanity. Through the school the community spirit can be fostered as it could never be through church, home or press, for the school appeals to all, and all should have in it a share and an interest and a pride and a feeling of ownership. Never has there been a more favourable opportunity than the present time offers for the promotion of genuine community feeling, and the school provides the best agency for carrying out such a move. Never has there been greater need for moral education and training in home and school, if our full duty is to be done and the results achieved which our progress in civilization demands.

Present conditions are unique: home and school must unite in applying and stressing the Golden Rule; by united effort much may be accomplished. The following extract from a recent daily paper is most suggestive: "It has been noticed everywhere that the greater number of criminals in this post-war wave of crime are boys or very young men, youthful amateurs in evil, whose callow minds have been most easily impressed by the pernicious influences of the times. Many of these, it has been shown, have gone out from comfortable homes to the exercise of banditry. This is a feature of the phenomenon that is most impressive in its call for the application of the counteracting influences of good in the bringing up of our boys."

II. REPORT OF INSPECTOR LEVAN

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to submit the following report on the High Schools, Collegiate Institutes and Private Schools under my supervision for the year 1919-20.

I have the honour to be, Sir,

Your obedient servant.

I. M. Levan,

Toronto, December 31, 1920.

During the year I visited the Collegiate Institutes at Barrie, Collingwood, Clinton, Fort William, Goderich, Guelph, Hamilton, Niagara Falls, North Bay, Orillia, Owen Sound, Port Arthur, Seaforth, St. Catharines, 14 in all; the High Schools at Alliston, Arthur, Beamsville, Bracebridge, Bradford, Brampton, Caledonia, Cayuga, Chatsworth, Chesley, Dundas, Dundalk, Dunnville, Durham, Elora, Exeter, Fergus, Flesherton, Fort Frances, Gravenhurst, Grimsby, Haileybury, Harriston, Kenora, Kincardine, Listowel, Markdale, Meaford, Midland, Mitchell, Mount Forest, Niagara Falls South, Niagara-on-the-Lake, Orangeville, Parry Sound, Penetanguishene, Port Elgin, Sault Ste. Marie, Shelburne, Smithville, Sudbury, Thorold, Walkerton, Waterdown, Welland, Wiarton, and Wingham, a total of 47; and the following Private Schools: De La Salle College, Aurora: Loretto Academy, Guelph; Loretto Academy, Hamilton, and St. Joseph's College, Toronto.

Accommodations

I regret that there is so little to report in the improvement of the accommodations during the year. Some general repairs, for the most part of a minor character, have been made; but nothing has been undertaken in the way of erecting new buildings. Owing to the general inactivity in building since the summer of 1914, some of the present buildings are too small to provide suitably for the growing attendance; and others are sadly lacking in the conveniences that are generally to be found in buildings of recent date, and that are now necessary for conducting efficiently the work of the modern High School. Few of the High Schools have a Gymnasium or an Assembly Hall. Indeed it is not generally realized that these should not be considered luxuries but necessities in the equipment of a High School. Many High Schools, too, are ill provided with accommodations for the practical teaching of Science.

Sanitary conditions in the older buildings often leave much to be desired. Ill lighted class-rooms and glossy blackboards impose a severe strain on the eyes of the pupils, and may easily result in permanent injury to the sight. Ventilation is often ill provided for in the older buildings. The lack of provision for it, I often think, is gradually undermining the health of pupils and teachers by compelling them to breathe and rebreathe overheated and vitiated air or by exposing them to draughts from windows opened to admit a supply of fresh air. Nor have the common drinking cup and the common towel, with all their possibility of spreading infection, yet been banished from all the schools, though they are gradually dis-

appearing. It is surely the right of growing boys and girls at school to be protected against conditions that are bound to impair their health. The danger of such conditions is generally acknowledged; but the matter of expense is too often allowed to stand in the way of improvement.

These injurious conditions, I should add, are not to be found in all schools, but as a rule only in those of the older type. When building conditions improve and the prevailing financial stress is lightened it is to be hoped that there will be a revival of school building, and that considerations of expense will not be allowed to stand in the way of suitable provision for protecting the health.

To one whose duties require him to study educational conditions in many localities, it is astonishing to observe the effect that a good High School building has on the general attitude of the community towards High School education. Speaking generally (for the influence of the teacher's personality must not be ignored), it may be observed that where the High School building is poor, people are indifferent or even hostile to the High School. On the other hand, a good building fosters local pride in the school, stimulates a general interest in its work, begets the sympathetic co-operation of parents with teachers and attracts pupils in ever increasing numbers.

A similar influence is exerted by good conditions within the school. Where the halls are wide and roomy, it is a much easier matter to preserve good discipline than where they are narrow and cramped. And, similarly, where the class-rooms are cleanly kept, well lighted, and well ventilated, and where the walls are tinted in pleasing harmonious shades, and hung with good pictures, the effect can readily be seen in the cheerfulness and contentment of the pupils and the deepened interest they take in their lessons.

Equipment

In respect to equipment the schools generally are in a better condition than in respect to accommodations. As a usual thing, the supply of books in the school library—both books of reference and books for supplementary reading—is satisfactory. The same is true, in the main, of the apparatus in the laboratory for teaching Science, particularly for teaching Chemistry, though not so generally for students' experiments in Physics. Indeed, few schools have a separate laboratory suitably equipped for individual experimental work in Physics. Here and there, too, a school is to be found with an inadequate supply of models for the teaching of Art, though most schools are satisfactorily equipped in this department. The value of Wall Maps in teaching History and Geography does not seem to be generally recognized, and, accordingly, I frequently find the supply of maps badly run down. The maps in the text-books on Geography and History are of great value to pupils in their private study; but for class work they cannot take the place of a Wall Map or even of a map roughly sketched on the blackboard by the teacher and used for reference during the lesson. With a Wall Map or a roughly sketched blackboard map the teacher can be certain that the pupil follows the lesson; he cannot be so sure if the pupil uses the map in his text-book. During the year a good many Boards have added to their equipment one or two or even three sets of the McConnell maps, of which the teachers speak very favourably.

Salaries

A decided improvement has taken place in the salaries paid to teachers. Since the beginning of the war, when the cost of living began to soar, it has been a general complaint that the teachers, in common with the other salaried classes,

were not sharing in the higher remuneration that was paid to other classes of workers. But about the beginning of the present year, the public conscience was aroused to the injustice of such a state of affairs, and a pretty general increase was made in the salaries of teachers. There were few teachers who did not share to a greater or lesser extent, in the benefit of this movement. But the increase was so long delayed while the cost of living was advancing by leaps and bounds, that even yet the teachers, as a whole, cannot be said to be receiving adequate pay, considering the importance of the work entrusted to them.

Scarcity of Qualified Teachers

The protracted delay in increasing salaries has had a marked effect on the welfare of the schools. The opportunities for obtaining higher financial rewards in other callings have attracted thereto young men and women who by education and character would have made excellent teachers. The supply of trained teachers has consequently fallen off, and throughout the Province generally the schools are suffering from a dearth of teachers. During the summer many School Boards advertised in vain for qualified teachers; the supply was not equal to the demand. The schools had to continue their work, if not with qualified teachers then with the best that could be secured. There are, accordingly, now not a few schools with one or more teachers who are teaching on temporary certificates. The effect of this is not hard to foresee; the pupils are the ones who will suffer. The scarcity is most pronounced in teachers with specialist standing in Science and Commercial work. Male teachers, too, are harder to obtain than female teachers. For this the war is partly responsible; but the low salaries paid to male teachers must share the blame. Most persons now in middle age can recall the time when the schools were staffed entirely by male teachers. Now, many High Schools have but one male teacher on their staff, and some not even one. It is casting no reflection on the work done by the female teachers to say that this is an undesirable state of affairs. As a general rule the female teacher is quite as effective in teaching as the male teacher. Indeed, some of the very best teaching I have seen has been done by female teachers. But notwithstanding this, few persons, I am sure, will deny that it would be better for the boys in our High Schools to be under the influence of a male teacher of refined manners and strong personality during some portion of their school life. Yet many of our boys have never felt the influence of a male teacher either in the Public or in the High School. This is surely a pity. The Department of Education can do little to induce men to enter the profession of teaching; the inducement must come from Boards of Trustees in the offer of higher salaries.

Attendance

The attendance in the High Schools has materially increased during the year. This increase is most gratifying, as it indicates a growing appreciation of the value of a High School education. However, it has not been without its drawbacks. In some cases it has resulted in a most undesirable congestion. Through lack of a sufficient teaching staff or from inadequate class-room accommodation, large numbers of pupils (in some cases as many as fifty or more), are crowded together into one room. Even if sanitary conditions were always satisfactory, there would still be cause for dissatisfaction in such a condition of affairs. No teacher can do justice to so large a class. If he gives individual attention to the backward and the dull, who need it most, the progress of the brighter pupils is retarded, and they fall into lazy habits. If, on the other hand, he gives the most of his attention to

the brighter ones, the dull and backward fall far behind, get discouraged and finally drop out of school, losing forever their chance of improving their education. The conditions within the school should be such that all pupils would have an equal chance to profit by the school, and such as would encourage all to remain at school until they have passed through all the forms, from the lowest to the highest.

A noticeable feature of the attendance is that in the great majority of the schools, the girls outnumber the boys. In some schools the disparity is very great. The causes are various. Perhaps through personal desire or for family reasons the boys are impatient to be free to be out in the world, earning their own living; or it may be that the High School courses are not framed so as to make a strong appeal to them; or they may be unable, without strong parental guidance and advice, to appreciate the value of a High School education. But whatever the cause, it is to be regretted that the boys do not more freely avail themselves of the advantages of a High School education. Perhaps the operation of the Adolescent Act may bring a remedy. It is to be hoped that the proposed revision of the High School course of study will make a stronger appeal to boys generally. I believe that larger playgrounds and a more general encouragement of games and sports and the other activities of school life would be a strong incentive to most boys to attend and to remain longer at school. "All work and no play" does not appeal to the average boy. But the chance of getting a place on the school's baseball, hockey or basketball team, or of taking part in the school's literary society, dramatic or debating club, would give him an entirely different view of the High School. In the encouragement and direction of school sports the male teacher can do much to keep boys at school.

Another feature of the attendance that claims a passing notice is the declining enrolment in the Upper School classes. By many principals this has been attributed to the Regulation that no longer permits the Faculty Entrance certificate to be a qualification for teaching in a High School. It is believed that a one year course for the Faculty Entrance certificate will restore normal conditions in the Upper School of High Schools and provide a much greater supply of first class teachers for the Public Schools.

The Spirit of Work Among Pupils

There has been a pretty general complaint among teachers that since the close of the war, pupils have been unsettled by the general spirit of unrest that is prevalent throughout the Province. It has been asserted that during the past two or three years it has been much harder to get boys and girls to devote themselves to their studies with the same ardour as before, and that the allurements of the automobile and the "movies" and the craze for dancing have seriously interfered with their attention to their studies. This has gone so far that several Principals have found it necessary to protest publicly and to warn parents that the moral fibre of the young is being weakened and their success in life endangered by their pursuit of pleasure. It is to be hoped that this attitude towards the more serious things in life is merely a temporary aberration, not a permanent legacy of the war.

Waste in the Class-Room

That there should be a certain amount of waste effort in teaching is inevitable. Wasted effort assumes many forms in the school-room. The work of the teacher of little experience is wasteful. He has not yet learned what part of the lesson should be stressed and what passed lightly over. Nor has he learned the power of

his pupils to grasp what he teaches, and he often teaches over their heads. He has not learned the value of review, daily review that prevents the pupil from forgetting what was taught yesterday, or last week or last month. Hence, much of his teaching is wasted effort, and must be done all over again. But if the teacher is intelligent and observant, experience will teach him how to avoid such wasted effort. Similarly, it is wasteful to attempt to teach when pupils are inattentive. The poor disciplinarian, who allows his pupils to dream or talk or be disorderly during the lesson, can never teach without enormous waste.

There is another form of waste, however, which is often to be found in the classes of even experienced and competent teachers. I refer to the habit of allowing pupils to answer in so low a tone that their answers cannot be heard distinctly throughout the class-room. These answers have to be repeated, sometimes two or three times before they can be generally heard; or, to save time, the teacher falls into the habit of repeating them himself. This form of waste is very common. I believe it is not going beyond the mark to say that the pupil who speaks out clearly and distinctly in answering is the exception rather than the rule. The habit is infectious: when one class contracts it, the whole school is soon infected. Where it exists a strong effort should be made to correct it. It can only be corrected by a concerted effort on the part of all the members of the staff.

I have already spoken of the waste caused by large classes, containing forty, fifty, or even sixty pupils. This form of waste falls most heavily on the backward pupil, often causing him to drop out of school and lose his chance of an education. A class of thirty pupils is the largest the average teacher can teach effectively, and in some subjects, those which require much individual help, even thirty is excessive. Where congestion exists, the Principal usually has to depend on the Board to provide a remedy by increasing the teaching staff or the accommodations.

I shall refer to but one other form of waste, perhaps the worst of all, the habit of note-taking. This is actually becoming a disease in some of our schools. I am aware that Notes are required in Elementary Science, to supply the place of a text-book. My condemnation of note-taking is not intended to apply to these, though it is my personal opinion that even in Elementary Science the pupil should have a text-book and be liberated from the slavery of note-taking. What I more particularly refer to is note-taking in History, in Geography, in Grammar, yes, and even in Literature. Usually the notes merely repeat what is given in the text-book; and often the pupil is engaged in writing notes when he should be listening to the teaching. At an age when a child is mature enough to be in a High School he is surely mature enough to understand the text-books provided for him. If he is not able to get his information in this way, he should be taught to do so. To my mind the worst feature of this note-giving is not that it is spoon-feeding, but that it is waste effort. The information thus given goes into the pupil's note-book and not into his head. When the lesson is over, the notes are laid aside and not referred to again till an examination is approaching. Then they are hurriedly referred to once more, held in the memory till the examination is over, then cast aside and forgotten forever. I have seen so much useless note-taking, so many false statements in notes, so much bad writing and spelling in note-books, that I have almost come to the conclusion that note-giving and note-taking is the arch enemy of good teaching.

History

The course in history, particularly the Lower School course, is, as I have said in previous reports, far too heavy; and both teachers and pupils will welcome the

prospect of a reduced prescription of work. The teacher of History has my deepest sympathy. To a few teachers, the power to teach History is a gift; most teachers, however, must acquire it by patient, laborious study. The text-book contains but the dry bones, which the teacher must invest with life. To supplement the text-book and add touches of interest to his teaching, he must read beyond the limits of the text-book. The specialist, with nothing but History to teach, can do so. But the great majority of History teachers are not specialists, but general teachers, often with little experience, teaching in the smaller schools, and overburdened with the multitude of subjects they have to teach. How can a teacher, who, after a hard day in school, works far into the night preparing nine or ten lessons for the next day's teaching, find time to do outside reading in History? Besides, many schools lack the equipment necessary for making History interesting, such as maps, books of reference, lantern slides, etc. When the prescription of work to be covered is reduced I believe we shall see much better teaching in History; and when the need of better equipment is strongly urged upon Boards, better equipment will be provided.

Oral Reading

A part of my duty at every school I visit is to test the Oral Reading. This test is by no means the least pleasing part of my work. To report in a general way by saying that the reading is improving would be misleading. It is nearer the truth to say that in some schools it is excellent, but that in many more it is poor, and sometimes positively bad.

The classes in Oral Reading are often entrusted to the least experienced teacher on the staff, because it is commonly thought that anybody can teach reading. But on the contrary, reading is a difficult subject to teach. More than one teacher has confessed to me that he is wholly at sea in teaching this subject. To teach it well requires special gifts or special preparation. I am not now referring to the teaching of what is called "Elocution," which is in great disfavour; but of plain, ordinary reading of the printed page so as to interpret the writer's thought and convey its meaning to the hearer. The boy or girl who has gone through the High School course should be able to read a passage of ordinary difficulty smoothly, sympathetically, with suitable modulation of voice and correct enunciation. To train harsh and monotonous voices to smoothness and flexibility, to teach the pupil to modulate his voice to suit the emotion of the passage he is reading, are very difficult problems and may tax the skill of even experienced teachers. But there is much work that every teacher can do if he realizes what should be done. He can correct simple errors in pronunciation, enunciation, pausing, grouping and emphasis. For the sake of illustration I shall refer to a few of many such errors I have actually heard pass uncorrected in the Reading lesson. Every teacher of Reading can add indefinitely to the number:

1. Omission of sounds from words:

lill (little).	*cap'n* (captain).	*'f only* (if only).
p'rade (parade).	*p'tic'lar* (particular).	*th' older man* (the older man).
sizzens (citizens).	*w'isper* (whisper).	
fam'ly (family).	*Feb'uary* (February).	
c'rect (correct).	*pitcher* (picture).	

2. Errors in the sounds of vowels or consonants:

marriage.	*jist* (just).	*ressolve* (resolve).
guarantee. *ar* sounded	*ketch* (catch).	*ressent* (resent).
charity. as in *car*.	*hurled* (herald).	*dessire* (desire).
character.	*vă-rious* (various).	
burried (buried).	*onhealthy* (unhealthy).	
murry (merry).	*frăg-rant* (fragrant).	
doo (dew).	*drawt* (draught).	

3. Misplaced accent: *exquis'ite, memōr'able, admir'able.*

4. EMPHASIS:

(1) Whatever might have been Sophie's SENSATIONS, the rest of the FAMILY, etc. (*The Vicar's Family Use Art.*)

(2) "You must promise me FIRST," said the schoolmaster, "that you'll not be noisy; or, at least, if you are, that you'll go away and BE SO." (*The Schoolmaster and the Boys.*)

(3) He came in the early DAYS. (*The Beloved Captain.*)

(4) A man is so in the way in the HOUSE. (*Cranford Society.*)

(5) The surgeon has his round of thirty miles and sleeps at CRANFORD. (*Cranford Society.*)

(6) They heard the surf a-roaring before the break of day;
But 'twas only with the peep of light we saw how ILL we lay.
(*Christmas at Sea.*)

(7) Thou ART the leader of the Scots, now well and sure I know
That GENTLE blood in dangerous hour ne'er yet ran cold nor slow.
(*The Island of the Scots.*)

5. GROUPING, ETC.:

(1) As they saw her nose again pointing handsome out to sea. (*Again* made to modify *saw.*)

(2) None knew this better than the idlest boys.—(*this* grouped with *better*).

(3) After he was gone, upon a general consultation, we could not tell what to make of these fine sentiments. (*Upon a general consultation* made to modify *gone.*)

(4) "You know whom I mean, farmer Williams." (*Farmer Williams* treated as a nominative of Address.)

Instances could be multiplied of such elementary errors, but enough have been given, I hope, to show to the inexperienced teacher how much work of an elementary character is to be done in the Reading class without even touching on voice training or other elements of the subject. It is the privilege of the teacher of Reading to help preserve the purity of our speech. His ear must be sharp to detect errors; but his judgment must be good, to warn him how far he may go in discussing such errors without losing the interest of his pupils. If he can keep the interest from flagging he will find the teaching of Reading a very profitable and most delightful part of his work.

French

I believe it can be said that the teaching of French is improving. Results are not yet by any means wholly satisfactory, but better methods are beginning to prevail, and more care is being devoted to the acquirement of a good accent. The criticisms levelled at the teaching of this subject have directed teachers to the need of teaching it as a living language, to be spoken as well as to be read. Too often the method of teaching French is dominated by the method usually employed in teaching Latin. The lesson is frequently conducted without the pupil being required to pronounce a single word or read a single sentence in the language he is learning. But a change is coming. Occasionally I observe lessons which, from beginning to end, even in the senior classes, are conducted without the use of a word in English. The establishment last year of summer courses in French conversation is already producing results. Those who attended the session last summer speak enthusiastically of the benefit received. It is to be hoped that the classes will be continued, and that teachers in greater numbers will take advantage of them to improve their accent and acquire facility in speaking French.

It would hasten improvement if we had a more suitable elementary Reader. Such a book should contain easy, interesting selections for beginners, simple poetry to be learned by heart, songs to be sung, as well as more difficult selections such as are found in the present Reader. It should be possible to introduce the pupil to a Reader six months after he has begun the study of the language. The present Reader is seldom used until the beginning of the third year.

For the benefit of inexperienced teachers, I would suggest the following method, which has been successfully employed in beginners' classes. It is merely suggestive and not intended for the teacher who has a better method; and in many of its details it is followed by experienced teachers.

1. For a month or six weeks at the beginning of the course, teach the class orally without the medium of a text-book. Use no English unless you cannot avoid it. As your object in this part of the work is to train the pupil's ear and tongue to the unfamiliar sounds of French, encourage him to express himself as freely as possible in answering your questions. Base your sentences on common salutations, statements about the weather, or on familiar objects in the class-room and the home. Use the blackboard to familiarize the student with the spelling of the foreign words. Don't let the interest flag; but secure as far as possible, at this stage, accuracy in pronunciation and freedom in using the foreign tongue.

2. When the time comes to introduce the Grammar, take pains to explain clearly the grammatical points involved in the lesson. Require the pupils to repeat the vocabulary until they are able to give approximately the sound of the new words with some freedom. Remember that the memorizing of vocabularies is important.

3. In taking up the exercises, it may be found profitable to dispense with the sentences for translation into French and to use the French sentences alone for ten or twelve exercises. The translation of English sentences into French will afterwards make a profitable review when the learner has acquired confidence. Require the pupils in turn to read the French sentence and give the English translation. First one sentence to a pupil; then two or three; then, as speed is gained, even the whole exercise. See that every pupil gets a chance to recite. Encourage them to speed up, until they are able to read freely at conversational speed, with conversational tone and inflection. Don't be afraid of repetition: let them repeat until the thought is as familiar to them in French as it is in English. Then with closed books read these sentences to them and have them translate. Their interest

will surprise you. Then send them to the blackboard to copy out these same sentences from the book or from your dictation. Blackboard work is necessary to teach them spelling. Before beginning a new lesson, review the last one. At frequent intervals review all the back work. You will be surprised how much review can be covered in a few minutes.

All this it may not be possible or advisable to do in the same lesson; but the method enables the teacher to give variety to the work and retain interest and enthusiasm. Keep repeating sentences they are familiar with. Work rapidly and train pupils to think rapidly in the new language and to aim at the speed of ordinary conversation.

4. After you have taken up ten or twelve exercises in this way, and the pupils have become conscious of their power to speak freely and rapidly within the limits of their vocabulary, turn them back to the beginning to take up the translation of the English sentences into French. Be sure to take this orally, and use repetition to give speed and freedom in translation. Then, when this result has been secured, send them to the blackboard to write out the whole lesson. Don't let them lag at this. If your teaching has been well done, this part of the work is merely a test in spelling. While they are writing, give them individual help by calling their attention to errors in spelling.

The method may seem to be slow, but will be found to be sure. It will also be found that such a method will beget the keenest interest, and that little trouble will be experienced in getting pupils to learn their French. Your own enthusiasm and energy will kindle enthusiasm and energy in your pupils.

Physical Culture

In most schools the regulations regarding the teaching of physical culture are faithfully observed. During the fall and spring months the exercises are usually taken out of doors. But when the weather becomes too cold for outdoor work the classes are brought inside. Many schools lack a gymnasium and assembly hall. In such schools the exercises during the winter months have to be conducted in the ordinary class-room between the rows of desks, where there is not freedom for all movements. The exercises, accordingly, are less satisfactory in such schools during the winter. Some schools, too, lack suitable apparatus, such as dumb-bells, wands, and Indian clubs. This part of the equipment is so inexpensive that every school should be well supplied.

Where there are suitable rooms for the work the exercises are usually keenly enjoyed by the pupils. But in this, as in all other school work, the personality, enthusiasm, and organizing ability of the teacher counts for much. Where the course is made progressive, new and more difficult exercises being introduced each succeeding year, pupils do not lose interest. But when Upper School pupils are grouped with First Year pupils, and are drilled year after year in the same small round of exercises, the interest flags.

The exercises afford the teacher an excellent opportunity of correcting common physical defects such as round shoulders, slouchy carriage, etc., but the opportunity to make such correction is often neglected. Moreover, the instruction in physical culture generally ends with the special lessons. It is not often carried into the class-room to correct faulty posture in sitting or standing. It might profitably be supplemented by instruction in some of the more important rules for good health.

Most boys and girls are fond of play, and it requires no effort of the teacher to get them to go out of the school-room at recess, to exercise their muscles and fill

their lungs with fresh air. Occasionally a pupil is found who has not learned to mix with his companions in play, and objects to participating in the games of his fellows during play-time. The following story shows how a resourceful teacher overcame such reluctance on the part of some of the girl pupils:

"The girls of our school objected to go outside for recess and take part in games. Their idea seemed to be just to sit in the class-rooms and chat, no matter whether the weather was warm or cold. As they were given the recess period for relaxation from the long sitting periods of the class-room, I insisted that they should go out. They went out with very great reluctance until the cold weather came, when four girls, acting as leaders, refused to obey the rules. The rule was then made that anyone who refused to go out must remain in the class-room and take physical culture throughout the recess period. In spite of this, the four leaders revolted the following day. They were each provided with a pair of iron dumb-bells, weighing about a pound each, stood beside an open window and put through the dumb-bell exercises for fifteen minutes while the teacher sat at her desk and counted. One lesson was enough, and the next day everyone was willing to go out. Now every girl is willing to take her share of the fun and play games suitable for the time of the year. At first the physical culture teacher helped them start their games, but now these same girls can use their own initiative and enjoy themselves for the full length of the recess."

The High School and Democracy

At each school I visit I am required to examine the general register, a register in which is recorded detailed information about the pupils and their parents. My examination of it is always attended by feelings of peculiar pleasure; for in it is proof, if proof were needed, that the High School is not the school of the rich, but the school of the common people. This record shows that the High School is a common meeting ground for the children of all classes. Here the sons and daughters of the tradesman, the mechanic, the labouring man, the professional man, and the struggling widow, the rich and the poor, the high and the low, the Protestant and the Roman Catholic, mingle together and work together in the spirit of amity and equality, regardless of distinctions of class or creed. Our High Schools encourage and develop the best spirit of democracy.

III. REPORT OF INSPECTOR ROGERS

To the Honourable R. H. Grant, M.P.P.,

Minister of Education for Ontario.

Sir,—I beg to submit the following report on the Collegiate Institutes and High Schools which I visited during the year 1919-20.

I have the honour to be,

Sir,

Your obedient servant,

Geo. F. Rogers,

Toronto, December, 1920.

Schools Visited

During the year 1919-20 I inspected the Collegiate Institutes in Brockville, Kingston, Lindsay, Morrisburg, Napanee, Ottawa, Perth, Peterborough, Picton, Renfrew, Smith's Falls, Vankleek Hill, and the High Schools in Alexandria, Almonte, Arnprior, Belleville, Bowmanville, Brighton, Carleton Place, Chesterville, Colborne, Cornwall, Deseronto, Hawkesbury, Iroquois, Kemptville, Markham, Morewood, Newburgh, Newcastle, Norwood, Omemee, Pembroke, Plantagenet, Port Hope, Port Perry, Prescott, Richmond Hill, Rockland, Sydenham, Trenton, Tweed, Uxbridge, Whitby, Winchester, and Weston.

I visited also the following private schools: St. Joseph's Academy, Lindsay; the Academy of St. Mary Immaculate, Pembroke; Albert College, Belleville; Ontario Ladies' College, Whitby; and the Convent of Notre Dame, Kingston. My reports on these schools covered the work of the Science and the Art Classes only. In Art the work is of a uniformly high character. The provision for practical work in Science is generally satisfactory.

For a few weeks during the spring of 1920, I was prevented by illness from carrying on my work, and I have to thank Inspectors Houston, Hoag and Mills, who very generously came to my assistance and visited the following High Schools: Athens, Avonmore, Campbellford, Gananoque, Madoc, Stirling and Williamstown.

Dr. Spotton, former High School Inspector, very kindly offered his services and visited the Cobourg Collegiate Institute and the Oshawa High School, where he was gladly welcomed as an old friend.

Accommodations

Little or nothing has been done in my inspectorate during the past year towards increasing the High School accommodations, although in a number of schools minor improvements have been made in the buildings. Even in those towns where sites have been purchased and plans prepared, the high cost of building has prevented the work being carried to completion. As the attendance has increased in nearly all the schools, this matter of adding class-rooms is a serious one.

There is a strong feeling in many Boards of Education that the cost of building schools should be borne equally by all those who are so situated in respect to the schools as to be able to take full advantage of the opportunities for High School education. In one or two places, indeed, the doors of the schools have been practically closed to pupils who live outside the High School district.

The most noticeable and the most serious result of inadequate accommodations is the congestion of pupils in the Lower School classes, and the condition brought about thereby is still further aggravated by the fact that in some of the smaller schools too much of the teachers' time is taken up with small Upper School classes. Indeed, it is doubtful if in three or four master schools Upper School work can be successfully carried on without doing some injustice to the great majority of the pupils attending these schools.

It is quite common to find first and second-year classes with an enrolment of from forty to fifty pupils each. This means that there can be very little individual attention given, and as a result the weaker one-third or one-quarter of the pupils failing of promotion fall by the wayside and are lost to the schools. It seems to me that something might be done for these pupils in the way of offering summer courses so that if a student fails of promotion at the end of the first year he may attend school for a short term during the summer and be ready in September to go on with his second year's work.

Reading, Writing and Spelling

In accordance with a time-honoured custom I examined the first-year pupils of the schools I visited in reading, writing and spelling, and I am glad to be able to report that there is a fairly successful attempt to improve the skill of the pupils in these comparatively mechanical but none the less important subjects of study.

One of the commonest criticisms of our schools offered by the man on the street is that High School graduates are so frequently lacking in neatness and accuracy, and in these respects our pupils are unfavourably compared with the boys and girls who come to us from Old Country schools. While the difference is usually exaggerated there is no doubt some truth in the statement that there is a difference. We cannot afford to disregard this criticism. It *is* important that our students should follow the accepted conventions in the spelling of English words, and that they should be neat and accurate in their work. These are indexes of mental habits. My observations are that increasing attention is being paid to this side of education.

English Composition

Too often the lot of the teacher of English Composition is not a happy one. He, or more frequently she, is literally a "slave of the lamp." Instead of having at least one period a day, free from teaching and presiding, to devote to the reading of compositions, his time-table is filled from 9 a.m. to 4 p.m. In an attempt to lighten his burden the subject of English composition—unquestionably one of the most important and the most difficult to teach—is frequently divided up and handed around among all the teachers on the staff, some of whom have little interest in the subject and little skill in teaching it. It is important that the teacher of Composition should be also the teacher of English Literature and have charge of the Supplementary Reading, so that he can direct the reading of the pupils whose crudeness in composition is due as much to a paucity of ideas as to lack of practice in composing.

I am pleased to note that more and more attention is being paid to oral work in Composition and that conspicuous progress is being made along this line. In a large number of schools the Composition class is organized into a sort of literary society with officers elected each term, and in some cases a committee of the pupils, under the direction of the teacher, names speakers, assigns subjects and arranges debates. One cannot but be struck with the advance which has been made in this subject in our schools during the past twenty-five years.

French

Both serious and humorous criticisms have been levelled at the teaching of French in Ontario, and not without cause. I am pleased to note, however, that a change is observable in the status of the language in our High Schools. Not only is the importance of French being magnified, but more attention is being paid to pronunciation and conversation. Of course, the character of the Matriculation examination will necessarily and unfortunately continue to be the main factor in influencing the teaching of this language, and as long as this examination is based on what appears to be the assumption that French is of interest to use solely on account of its grammar and its literature so long will the teacher of French—no matter how familiar he may be with the living language—be confined within too narrow limits.

But in the Lower and Junior Middle School classes there is an opportunity of giving pupils some skill in the use of the language, and I am pleased to report that in a number of schools I have visited full advantage is being taken of this opportunity. In one large school I heard some very creditable oral compositions given in French, and in several schools French dictation is a regular part of the classroom work. In this connection I may say that the school libraries should contain a supply of Junior French Readers suitable for Lower School classes, as the authorized Reader is much too difficult for beginners.

In several schools at the eastern end of the Province excellent work is being done among pupils who come from French homes, and it seems to me that something should be done to encourage more of these pupils to qualify themselves as High School teachers and to enter our educational system as teachers of their native language.

Current History

One hesitates even to suggest the adding of one jot or one tittle to the already overcrowded High School curriculum, but there certainly should be some place on the time-table for the discussion of current events. It is a rare thing to find a daily newspaper in the school library and scant attention is paid to History in the making.

Quite recently I made some investigations in two schools where the pupils were above the average in general intelligence, and in knowledge of the prescribed subjects of studies, and the results of my investigations were somewhat amazing. The pupils knew all about the Treaty of Paris but nothing about the Treaty of Versailles. They knew who founded Quebec and Montreal, but few could name the Premiers of Great Britain, Canada and Ontario. I found that only three or four in each class ever looked at the newspapers, and some of these were candid enough to confess that the only "news" in which they were interested concerned "Mutt and Jeff" and the domestic affairs of the "Jiggs family." In a few schools, however, I found that the literary societies subscribed for newspapers and magazines and placed them where they were accessible to the students at noon and recess. If this were followed by a few minutes' discussion of each day's important news the time would be well spent and would result in the cultivation of an enquiring mind on the part of the pupil regarding current history.

The phonograph is now regarded as an essential part of the equipment of many of the schools. It is used commonly and with great success in the physical culture classes. In Belleville it is made excellent use of in the French classes, and in Peterborough I saw a class of about twenty-five girls typewriting to music.

At the conclusion of two years spent in visiting the High Schools and Collegiate Institutes in the eastern part of the Province I cannot close this report without making mention of the fine spirit of work and of co-operation between pupil and teacher which I found in almost every school I inspected. The kindness and courtesy which one receives from trustees, teachers and pupils makes an official visit to these schools a real pleasure.

APPENDIX E

REPORT OF THE INSPECTOR OF MANUAL TRAINING AND HOUSEHOLD SCIENCE

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to submit herewith my twentieth annual report on Manual Training and Household Science as carried on in the schools of the Province.

I have the honour to be,

Sir,

Your obedient servant.

Albert H. Leake.

Toronto, January, 1921.

The work has proceeded generally along the lines followed in previous years and has been marked by considerable extension. Additional Manual Training and Household Science Centres have been opened, or are to be opened shortly, in Brantford, Fairbanks, Fort William, Hamilton, Kitchener, Madoc, Niagara Falls, Peterborough, Sault Ste. Marie. St Catharines has established a new Manual Training Centre, and Household Science has been introduced into the Separate Schools in London and Toronto.

A full list of the urban centres where Manual Training and Household Science are now being taught, is appended to this report.

The developments of the year needing special mention are as follows:

1. The conclusion of the year's course for training returned soldiers as Instructors in Manual Training.

2. The development of Household Science Instruction, and the serving of a hot dish at the noon lunch in rural schools.

3. Changes in, and additions to the equipment provided for Household Science in order that the character of the work may be extended.

4. Amendments to the Regulations, in order that the work may be more easily introduced into the rural schools.

5. The publication of a new Manual on "Manual Training."

Returned Soldiers' Training Course

For several years past there has been a decided shortage of fully qualified Manual Training teachers. This fact, coupled with the rapid extension of the work, forced the issue of permits and the recognition of the Elementary certificate in many situations where the Ordinary or Specialist certificate was legally required.

For the present this condition is fortunately at an end: but the rapid absorption of the teachers recently trained does not hold out any hope of this condition continuing for very long.

In June, 1919, thirty returned soldiers were selected from a large number of applicants for one year's training for the purpose of becoming Manual Instructors. These men were given a thorough course in all forms of Manual activities suitable for school purposes—elementary construction in various materials, woodwork, metal work and machine shop practice. In addition, instruction was given in English, Mathematics and the Science of Education. Each man was required to give about thirty lessons in Manual Training and was criticized by an experienced teacher.

This course ended in June last, and the results of the closing examination held at that time were very satisfactory. All the candidates were granted certificates, but six of them were required to take further study in the Science of Education, which, as all of them were without teaching experience, was a result that might naturally have been expected. The conduct of these men throughout the whole course cannot be spoken of too highly. After their experience in the trenches where the majority of them saw considerable service, this year's training taxed them to the utmost along lines entirely different from any they had travelled before.

According to the latest information I have received, twenty-three of these men have been appointed as Manual Training Instructors. While, of course, it is yet a little early to say definitely, each man shows promise of being a good teacher and of thoroughly justifying the Department in the rather large expenditure on their training.

The places where these men are employed are, Toronto, Hamilton, Kitchener, Collingwood, Sault Ste. Marie, Fairbanks, Walkerville, Brantford, Niagara Falls. Five of the men have taken temporary positions to teach Farm Mechanics in Agricultural Schools in the Western Provinces, hoping to return to Ontario as soon as suitable openings present themselves. The positions these men have taken carry in every case a satisfactory initial salary.

The success of this experiment is all the more gratifying as this plan of obtaining teachers is to some extent a reversal of previous policy. The attempt to secure an adequate supply of efficient Manual Training Instructors, by training qualified teachers, has not been the success that could have been desired. The attendance at the training school at the Ontario Agricultural College has not for many years past been more than six and often less. In order that a man may be a successful teacher of Manual Training, he must possess a considerable amount of mechanical skill as well as teaching ability. The question resolves itself into whether is it wiser and more to the advantage of the schools to attempt to give this necessary mechanical skill to a teacher, or, to give the necessary measure of teaching ability to one who already has this mechanical skill. The experience of these soldiers, who were nearly all skilled mechanics, in the schools should go far towards solving this problem.

At present we have no means of training instructors except at Guelph, and the whole question of providing an adequate supply of teachers for this subject will require early attention; for, notwithstanding the present attitude in one of our large cities, additional centres are being rapidly opened up in various parts of the Province.

Household Science in Rural Schools

Probably the greatest and most gratifying development of the work has been in the direction of Household Science in the rural schools. Five years ago we had scarcely a school in the Province where either Household Science was taught or a hot dish was served to supplement the cold box lunch brought from home; now there are

approximately 200 schools where the subject is taught in an elementary but fairly efficient way and where some hot dish is served to the pupils at noon. The Manual "Household Science in Rural Schools," containing as it does full details regarding organization, courses of study, equipment and grants is proving of great service to the Rural School teachers in this connection.

Interest in this subject is rapidly growing in the Province and scarcely a mail is received that does not contain requests for advice and information and requests to address public meetings on the subject. During the year all the time I could spare from the regular inspection of schools has been spent in attending meetings in rural districts. My regret is that I could not devote much more of my time at this section of the work, as I feel that a more intimate connection of the Department with the community can be made by this close contact than by any other means. This contact is earnestly desired and thoroughly appreciated when once made. These meetings often partake of the nature of social functions in which the whole district joins, and the development of a real community spirit through which all take a deep interest in the school and its work.

Many of the Public School Inspectors are taking the greatest interest in the development of this work, notwithstanding the fact that they receive no extra remuneration for the inspection of this subject as they do in the case of Agriculture. This discrimination between the subjects might in justice be removed.

The Public School Inspectors frequently arranged series of meetings—afternoon and evening—lasting a whole week, to give me an opportunity to lay the matter before the Trustees and ratepayers of the district. I recently attended a meeting of the Boards of Rural School Trustees around the City of Toronto, and, in this way, was able to cover much ground. During the coming year, it is hoped that much more of this work will be accomplished.

In order to facilitate the introduction of this feature into the rural schools, and particularly into the schools of the districts, where it is probably needed more than in any other part of the Province, and where a number of teachers with Third Class certificates are employed, the Regulations applying to rural schools have been amended. As these alterations do not exist anywhere in printed form, they are now submitted:

The Public and Separate Schools

Special Provisions for Manual Training and Household Science in Rural and Urban Schools.

(1) The Board of a rural or an urban school which is unable to comply with the provisions of the General Regulations, but which maintains classes in Manual Training as applied to the work of the Farm or in Household Science suitable to the requirements of the rural districts, which employs a teacher or teachers qualified as below, and which provides accommodations and equipment and a course of study, approved by the Minister before the classes are established, will be paid by the Minister the sums provided in the scheme below, out of the grants appropriated therefor; said grants to be expended on the accommodations, equipment, and supplies for Manual Training and Household Science. In no year, however, will the Departmental grants exceed the total expenditure of the Board for these classes.

(2) On the report of the Inspector of Manual Training and Household Science that the organization and the teaching of the classes in Manual Training or Household Science maintained as provided above are satisfactory, an annual grant will be paid by the Minister out of the Grant appropriated according to the following scheme for each room equipped:

(*a*) (i) When the teacher holds a Second Class Certificate but is not specially certificated in Manual Training or Household Science—

Initial Grant: to board, $40; to teacher, $15. Subsequent Grant: to board, $20; to teacher, $15.

(ii) When the teacher holds a Second or Third Class certificate and has satisfactorily completed the work of one Summer Course in Manual Training or Household Science, provided by the Department, and undertakes to complete Part II the following year, or receives permission from the Minister to postpone said part—

Initial Grant: to board, $40; to teacher, $20. Subsequent Grant: to board, $20; to teacher, $20.

(*b*) (i) When the teacher holds a Second or Third Class certificate and in addition the Elementary certificate in Manual Training or Household Science—

Initial Grant: to board, $75; to teacher, $40. Subsequent Grant: to board, $30; to teacher, $40.

(ii) When the teacher holds a Second Class certificate and in addition the Ordinary certificate in Manual Training or Household Science—

Initial Grant: to board, $75; to teacher, $50. Subsequent Grant: to board, $30; to teacher, $50.

(*c*) When a school taking up Household Science provides at least one hot dish for the pupils staying to lunch from November 1st to March 31st, the above grants to the teachers of Household Science will be increased $10.

Before the grants are paid to these schools, a form is required to be filled out by the Teacher, Trustees and Inspector, giving their opinions as to the success, or otherwise, of the work. A large majority of their opinions are favourable and in very few cases is adverse criticism offered; these opinions or a selection of them are available for your inspection at any time.

Normal Schools

In the instruction now given in the Normal Schools, the requirements of the rural schools are, as in previous years, being stressed. Each of the seven schools has in addition to the regular equipment suitable for urban schools, an equipment designed for rural schools, and with this good work is being done, limited only by the time allowance for this subject. Each Normal School has three rural practice schools affiliated with it and the weakest part of the organization at present is these schools. Some of them attempt to teach neither Manual Training nor Household Science, in others it is attempted perfunctorily while in very few is it satisfactorily done. This situation needs attention, as it is essential that the student teachers see these subjects in operation in an actual rural school under actual conditions if they are to receive the full benefit of their training.

In many cases the masters and mistresses of the Normal Schools are acting as friendly advisers of the teachers after they leave the school. In most cases this is done by correspondence, and as the practice is calculated to be of benefit both to the Normal School and student, it should be extended. I append a copy of a letter received by one of the Household Science Instructresses in a Normal School:

Oil Springs, R.R. No 2,
November 14th, 1920.

Dear .....

Last year I was a student and learning how to teach and especially conduct a hot lunch in a rural school. This year I am actually putting what I learned into practice. Since I am merely utilizing many of the ideas which I received from you I thought perhaps you would be interested in the hot lunches of S.S. No. 8, Dawn.

I first talked it over with the parents and then called a meeting of the Board. My trustees told me to buy what I needed and give them the bill. I bought a double boiler, large potato kettle, dish pan, wooden spoons, a small granite basin, a garbage pail, one granite pail, a couple of paring knives, two cans of Old Dutch and a small dipper. Besides these utensils the parents furnished us with a potato masher and ricer. Each child brought his or her own dishes, a knife, fork and spoon, cup, soup plate and dinner plate. We cleaned out a cupboard that was in the school and stowed our treasures in this. For our table my secretary made a large trestle, one about 4 feet by 9 feet, and we cover it with oilcloth. We use an ordinary box stove for cooking.

I spent $2.50 for supplies, several men from the section gave us a bag of potatoes, and the pupils take their turn in bringing supplies each morning. For instance, some bring milk, eggs, butter, etc. I tabulate what each one brings.

On the first of November one pupil brought a chicken nicely prepared for boiling. The pupils peeled the potatoes, etc., and at ten minutes past twelve we sat down to a real nice, hot dinner. Strange to say the chicken had four feet, three wings, five hearts, three gizzards and two wishbones. Evidently a miraculous bird.

The next day we had cocoa, then creamed potatoes, tomato soup, corn starch pudding, cheese sauce, stewed onions, rice pudding, and potato soup, all in turn.

I have two pupils prepare the lunch, two wash dishes and one act as housekeeper for a week. So far everything has been O.K. except one family refuses to bring anything, but everyone agreed to let the children eat with the others. I am sure the parents will soon be ashamed.

I sincerely hope that I haven't bored you with my letter. I am so interested in it myself, I guess I expect everyone else to feel the same.

I would like very much to teach Household Science for a grant. Would you please list a few of the things to teach, in the Breakfast Series, etc. I hardly know just what to teach. If you know of any book, will you either send it to me and I'll pay you, or you tell me where I can send for such a book to help me.

Hoping I haven't been too much trouble.

Changes in Equipment

In the towns and cities where Manual Training and Household Science have been started for some years, the most noticeable development is a change in the style of equipment, particularly in the Household Science departments. For many years the tendency was to regard Household Science as consisting of cookery only, but now that conception is broadening and instead of the kitchen and the stove being considered as the unit, the activities of the whole house are being considered. The newer equipments are of three kinds—first, a house is fitted up very much as an ordinary dwelling and this is used for periodical classes of girls from the surrounding schools; second, the ordinary rooms of a house are supplied in the school building and instruction is given in the various rooms, the classes being divided for this purpose; third, a large room in a school is chosen and this is divided by partitions, sometimes removable, to represent the various rooms of the average dwelling. In this way a successful attempt is being made to remedy the somewhat artificial conditions that have hitherto obtained, and to reproduce as far as may be possible in school the actual conditions of the home.

While it is still necessary, and probably always will be, to use small quantities for experimental and teaching purposes, most schools are introducing large quantity cooking whenever possible, and the family meal is being taken as the basis for much of the work. Some schools are doing work for the philanthropic institutions in the neighborhood. In this way the particular instruction benefits and the pupils get the advantage of large quantity cooking—the material being supplied by the institution concerned.

Sewing and needlework are being increasingly introduced into the schools and is now being directed towards the making of actual garments for the children's own wear, instead of the making of a large number of practice stitches of which the children do not see the application.

Manual Training

The character and extent of the work is gradually being enlarged. The year has experienced a gratifying growth in the number of schools taking the work, and more workmanlike methods of instruction are being adopted. The work is assuming a practical character and articles for use in the home and the school now predominate. Of course it is still necessary to teach technical processes as such, but they are now being embodied in useful articles and the various local exhibitions periodically held in different parts of the Province show that, notwithstanding the

very limited amount of time that is allowed for the work, a very large quantity of useful educative work is being done.

As noted in previous reports, there are some towns in the Province with a population of more than 5,000 each that have not yet provided facilities for giving instruction in either Manual Training or Household Science. In towns of this size, if the work is properly organized, it should not be difficult to occupy the whole time of one teacher. He should be given charge of the whole of the manual work from Grade I to the end of the Public School course. In this way a graded scheme could be carried on throughout all the forms of the schools in that particular town.

Other towns might well co-operate in this matter and employ a teacher between them. It should not be difficult to form a group of three or four towns within easy reach of each other, each having its own Manual Training centre and equipment and each paying its share of the special teacher's salary, according to the time spent in each place. Now that radial lines are being rapidly extended throughout the Province, the possibility of such co-operative action is becoming greater. The attention of the local inspectors is directed to this matter. Such co-operative action would not only result in the introduction of Manual Training and Household Science, but would also promote a better feeling among the different municipalities and lead to combined action in other fields of civic betterment. I am pleased to note that a few such groups are considering the possibility of such an arrangement.

Early in the year, there was published a revised edition of the Manual on "Manual Training." Many additions have been made to this book with the specific idea of helping the elementary work in the Lower Grades. The requirements of the rural schools were specially considered and much matter added, which is being found very helpful and has already led to the introduction of the subject into several schools.

Manual Training and Household Science both suffered serious handicap in the schools by being regarded as extras. Notwithstanding their general adoption, they have forced their way by merit and not by compulsion. They hardly seem even yet to form an integrate part of the curriculum. Those few schools that are without them argue that they cannot find time for their introduction, and those schools that do take them, while not unduly complaining of the burden, yet wish that better provision could be made by the omission of something else. The time is now ripe for consideration of the question whether these subjects should not be allowed as an option with some other subject.

Owing to the increased cost of equipment, the grants now allotted for these subjects are found to be inadequate, and during the coming year the question of their revision should be considered.

In conclusion, I wish to sincerely thank both you and the Deputy Minister for the help and encouragement I have received and for the interest displayed in my work.

Manual Training and Household Science Centres

Manual Training		Household Science	
		Belleville	High School.
Beamsville	High School.	Beamsville	High School.
Brantford	Collegiate Institute.	Brantford	Collegiate Institute.
	Central Public School.		Central Public School.
	Major Ballachey Sch.		Major Ballachey Sch.
Brockville	Public School.	Brockville	Public School.

Manual Training		Household Science	
Chatham	Collegiate Institute.	Chatham	Collegiate Institute.
	Public School.		Public School.
		Cobourg	Collegiate Institute.
Collingwood	Public School.	Collingwood	Public School.
Cornwall	Public School.	Cornwall	High School.
Fairbanks	Public School.	Fairbanks	Public School.
Fort William	Collegiate Institute.	Fort William	Collegiate Institute.
	Public Schools.		Public Schools.
Galt	Collegiate Institute.	Galt	Collegiate Institute.
Guelph	Consolidated School.	Guelph	Consolidated School—
	Public School.		(tem. closed).
			Public School.
Hamilton	Collegiate Institute.	Hamilton	Collegiate Institute.
	Normal School.		Normal School.
	Caroline St. School.		Adelaide Hoodless.
	Earl Kitchener School.		Caroline St. School.
	King George School.		King George School.
	Memorial School.		King Edward School.
	Picton Street School.		Memorial School.
	Wentworth St. School		Picton Street School.
			Wentworth St. School.
Ingersoll	Collegiate Institute.	Ingersoll	Collegiate Institute.
Kingston	Public Schools.	Kingston	Public Schools.
Kitchener	Collegiate Institute.	Kitchener	Collegiate Institute.
	Public Schools.		Public Schools.
Listowel	Public Schools.		
London	Collegiate Institute.	London	Collegiate Institute.
	Aberdeen School.		Aberdeen School.
	Alexandra School.		Alexandra School.
	Boyle School.		Boyle School.
	Chesley School.		Chesley School.
	Lord Roberts.		Lord Roberts.
	Riverview School.		Riverview School.
	Ryerson School.		Ryerson School.
	Tecumseh School.		Tecumseh School.
			Talbot Street School.
			Sacred Heart School.
	Normal School.		Normal School.
Madoc	Public School.	Madoc	Public School.
Niagara Falls	Collegiate Institute.	Niagara Falls	Collegiate Institute.
		Niagara Falls S.	High School.
North Bay	Normal School.	North Bay	Normal School.
Oakville	High School.		
Orangeville	Public School.		
Ottawa	Normal School.	Ottawa	Normal School.
	Cambridge St. School.		Cambridge St. School.
	Connaught School.		Connaught School.
	Creighton St. School.		
	Elgin Street School.		
	First Avenue School.		First Ave. School.
	Glashan School.		
	Hopewell Ave. School.		Hopewell Ave. School.
	Mutchmor St. School.		
	Osgoode St. School.		Osgoode St. School.
	Percy St. School.		
	Slater St. (Kent School).		Slater St. (Kent Schl.).
	Wellington St. School.		
Owen Sound	Collegiate Institute.	Owen Sound	Collegiate Institute.
	Dufferin Public School.		Dufferin Public School.
		Paris	Public School.
Peterboro	Normal School.	Peterboro	Normal School.
	Central School.		Central School.
	Prince of Wales.		Prince of Wales.
Port Arthur	Collegiate Institute.	Port Arthur	Collegiate Institute.
Port Perry	High School.	Port Perry	High School.
St. Catharines	Public Schools.		
St. Thomas	Collegiate Institute.	St. Thomas	Collegiate Institute.
			Balaclava St. School.

	Manual Training	Household Science
Sarnia	Public Schools.	Public Schools.
Sault Ste. Marie	Collegiate Institute.	Collegiate Institute.
	Central Public School.	Central Public School.
	West End Public School.	West End Public Schl.
Smith's Falls	Collegiate Institute.	Collegiate Institute.
Stratford	Collegiate Institute.	Collegiate Institute.
	Romeo School.	Romeo School.
	Normal School.	Normal School.
Toronto	Annette St. School.	Annette St. School.
	Brown School.	Brown School.
	Dewson St. School.	Dewson St. School.
	Earl Grey School.	Duke of Connaught Sch.
	Eglinton School.	Earl Grey School.
	Essex St. School.	Eglinton School.
	Jesse Ketchum School.	Essex St. School.
	Kent School.	Huron St. School.
	Kimberley School.	Jesse Ketchum School.
	King Edward School.	Kent School.
	Manning Ave. School.	Kimberley School.
	Park School.	King Edward School.
	Parkdale School.	Lee School.
	Perth Avenue School.	Manning Ave. School.
	Queen Alexandra Schl.	Orde St. School.
	Ryerson School.	Park School.
	Victoria St. School.	Parkdale School.
	Wellesley School.	Perth Ave. School.
	Williamson Rd. School.	Queen Alexandra Sch.
	Winchester St. School.	Ryerson School.
	Oakwood Col. Institute.	Wellesley School.
	Riverdale Col. Institute.	Western Ave. School.
		Williamson Rd. School.
		Winchester St. School.
		Oakwood Col. Institute.
		Riverdale Col. Institute.
		St. Paul's Sep. School.
		St. Francis Sep. School.
		Sewing Centres:
		Brock Ave. School.
		Brown School.
		Clinton St. School.
		Dovercourt School.
		Duke of Connaught Sch.
		Eglinton School.
		Essex St. School.
		Frankland School.
		Huron St. School.
		Jesse Ketchum School.
		Lee School.
		Palmerston Ave. School.
		Park School.
		Perth Ave. School.
		Queen Alexandra Schl.
		Regal Road School.
		Ryerson School.
		Victoria St. School.
		Wellesley School.
		Western Ave. School.
		Williamson Rd. School.
		Winchester St. School.
		Withrow Ave. School.
Tweed	Public Schools.	Public Schools.
Walkerville	Public Schools.	Public Schools.
Whitby	Collegiate Institute.	
Windsor	Collegiate Institute.	Collegiate Institute.
	Assumption St. School.	Assumption St. School.
	Douglas Ave. School	Douglas Ave. School.
	Wyandotte St. School.	Wyandotte St. School.
Woodstock	Collegiate Institute.	Collegiate Institute.

APPENDIX F

REPORT OF THE INSPECTOR OF ELEMENTARY AGRICULTURAL CLASSES

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I beg to submit for your consideration a report on the Agricultural Classes in connection with the schools of the Province for the year 1920.

I have the honour to be,
Sir,
Your obedient servant,
J. B. Dandeno,
Inspector of Elementary Agricultural Classes.

Toronto, January, 1921.

PUBLIC AND SEPARATE SCHOOLS

Ungraded Schools

The work of the Agricultural Classes in ungraded schools, which are necessarily all rural schools, is making steady progress from year to year, and the results are very gratifying indeed. As indicated in the table showing the number of schools carrying on the work and qualifying for grants, nearly one-third of the schools are now maintaining classes in Agriculture which shows a very encouraging condition. The most of these schools have practically only made a beginning, and, notwithstanding the difficulty in securing ground for garden work, and securing the co-operation of the farmers themselves, we have reason to feel gratified with the improvement which, so far, has been made in this direction.

In order to conduct Agricultural Classes successfully, a fair amount of equipment is necessary because, unless the work is carried on as practical work—laboratory work—the subject loses a large portion of its real value. Pupils of the Third and Fourth Book classes are at an age when eagerness to do things with their hands is quite pronounced. They like to do things themselves for themselves, and, in the *doing,* they are training hand, eye and mind without the mental strain which is demanded of the pupil when he is pursuing subjects which are, to him, more abstract and necessarily more exhausting. Experimental work is not only far more attractive but also just as surely educational.

Because of the fact that actual equipment and concrete material are essential, a new method of treatment of subject matter in class is necessary, consequently the teacher is thrown more upon his own resources for this subject than for the ordinary academic subjects on the programme. Pronounced ability on the part of the teacher, therefore, will be more noticeable where Agricultural Classes are maintained, and this is often shown by the fact that such teacher sees to it that suitable equipment has been provided.

Notwithstanding that the equipment necessary for carrying on classes is paid for by the Provincial Government, one of the most difficult things with which we have to contend is the lack of suitable equipment and material. Because books, pens, pencils and maps have for so long been regarded as practically the only equip-

ment necessary for class instruction in rural schools, it is not easy, in very many cases, to convince rural school trustees of the necessity for providing equipment and material for laboratory and experimental purposes. However, considerable advancement has been made in this direction during the past year or two, more particularly when the real object of education is understood. The boy who examines, by the use of a spade in the garden, the surface soil and subsoil with a view towards understanding the water relations, will acquire educational experience no less fundamental than the other boy who analyzes a complex sentence for the grammatical relationships. The boy who grows beans on his plot and, after harvesting the crop, by means of scales and measure, calculates the weight per bushel of the seed, will have completed a lesson hardly less important educationally than if he had memorized the chief facts involved in a chapter or two of the Norman Conquest.

Moreover, there is a general opinion among teachers that the curriculum of the public schools is rather long and that it should be shortened rather than lengthened by the addition even of a bonus or elective subject. Such opinion is probably valid, especially if Agriculture were a subject of the academic type. But it has been abundantly proved that pupils will carry on the work of the classes in Agriculture, in addition to the regular academic subjects of the curriculum, without any hindrance whatever to the latter. This is explained by the fact that a practical subject draws upon certain other phases of mental energy which are not employed extensively in the study of the academic subjects. The study of Agriculture is, therefore, not so much an additional burden upon the mental powers of the pupils as it is a rounding out of the course of study to meet the needs of active growing pupils.

Our system of education, based as it is upon scholastic methods which employ machinery chiefly for academic attainment, has been nurtured by generations of practice, and this has taken such a firm hold upon the minds of people that scholastic education has been considered the only kind worthy of the name. Consequently, we find many people speaking of such subjects as Agriculture in such terms as "frills" and "fads," implying that book learning is the chief and only means of education. Moreover, the Ontario System of Education has definite curricula, with suitable examinations marking each step of advancement, and these examinations have such well-defined academic values that farmers as well as others have grown up with the idea that these, and only these, are the tangible results of the system.

Much has been written during the past year to the effect that our rural schools are decadent and have not kept step with the progress of other institutions. The rural school has become the butt of adverse criticism, especially by those unfamiliar with the conditions of the schools themselves.

There is no doubt whatever that the rural schools, so far as the teaching is concerned, have made great improvement, and these very rural schools are the breeding ground of our best citizenship to-day. They are, in fact, the bulwark of our best civilization. It is quite true that the accommodation provided in rural sections is not equal to that in the urban municipalities; but, after all, even under this handicap, the rural school is giving a good account of itself. Better buildings and equipment are needed in the country, but if those who attempt to abuse the rural schools would visit a few hundred of these institutions, they might have their eyes opened.

The most noticeable feature in very many of the rural schools is the small number of pupils. In fact, that is what is wrong with the rural schools—too few pupils. It is, however, too delicate a matter to do more than refer to here.

Number of Ungraded Schools with Classes in Agriculture, Sept., 1919—June, 1920

Inspectorate	Inspector	No. of Schools	Number of	
			Home Gardens	School Gardens
Algoma	L. A. Green	12	9	3
Algoma and Timiskaming	J. A. Bannister	3	1	2
Brant and Norfolk	T. W. Standing	9	6	3
Bruce	W. F. Bald	27	12	15
Bruce	John McCool	21	10	11
Carleton and Lanark	R. C. Rose	12	5	7
Carleton	Thos. Jamieson	10	3	7
Durham	E. E. Snider	24	19	5
Durham and Northumberland	J. W. Odell	19	16	3
Dufferin	W. R. Liddy	22	6	16
Dundas	H. B. Fetterly	53	37	16
Elgin	J. C. Smith	58	33	25
Elgin	J. A. Taylor	24	17	7
Essex	D. A. Maxwell	10	3	7
Frontenac	S. A. Truscott	2	1	1
Grey	Samuel Huff	4	2	2
Grey	H. H. Burgess	8	3	5
Grey	Robert Wright	8	2	6
Glengarry	J. W. Crewson	31	26	5
Haldimand	J. L. Mitchener	15	12	3
Halton and Wentworth	J. M. Denyes	19	11	8
Hastings	H. J. Clarke	32	25	7
Hastings	J. Colling	1	1	.....
Hastings	J. E. Minns	30	23	7
Huron	J. M. Field	17	12	5
Huron	J. E. Tom	57	45	12
Kent	W. H. G. Colles	65	25	40
Kent	J. H. Smith	53	30	23
Lambton	Henry Conn	39	23	16
Lambton	N. McDougall	36	27	9
Lanark	F. L. Michell	13	11	2
Lennox and Addington	E. J. Corkill	2	2	.....
Leeds and Grenville	J. F. McGuire	22	15	7
Leeds and Grenville	W. C. Dowsley	27	22	5
Leeds and Grenville	T. A. Craig	19	17	2
Lincoln	G. A. Carefoot	11	4	7
Middlesex	H. D. Johnson	41	30	11
Middlesex	P. J. Thompson	62	21	41
Manitoulin	J. W. Hagan	4	1	3
Northumberland	R. Boyes	4	2	2
Norfolk	H. F. Cook	12	11	1
Ontario	T. R. Ferguson	7	4	3
Ontario	R. A. Hutchison	14	8	6
Oxford	R. A. Paterson	6	3	3
Oxford	J. M. Cole	36	29	7
Parry Sound	R. O. White	1	.....	1
Peel	W. J. Galbraith	22	16	6
Perth	Wm. Irwin	44	32	12
Perth	Jas. H. Smith	34	19	15
Peterborough	Richard Lees	10	2	8
Peterboro and Victoria	G. E. Broderick	7	3	4
Prince Edward	F. P. Smith	18	10	8
Prescott and Russell	John Nelson	1	.....	1
Renfrew	G. G. McNab	18	9	9
Renfrew	I. D. Breuls	2	.....	2
Rainy River and Timiskaming	Chas. McDowell	2	1	1
Simcoe	J. L. Garvin	6	1	5
Simcoe	E. J. Longman	4	3	1
Simcoe	Isaac Day	20	18	2
Stormont	James Froats	28	25	3

Number of Ungraded Schools with Classes in Agriculture, Sept., 1919—June, 1920—Con.

Inspectorate	Inspector	No. of Schools	Number of	
			Home Gardens	School Gardens
Timiskaming and Algoma	W. Asbury Wilson	3	2	1
Thunder Bay	J. Ritchie	1	.....	1
Victoria	W. H. Stevens	1	.....	1
Waterloo	L. Norman	11	8	3
Waterloo	F. W. Sheppard	6	2	4
Welland	James McNiece	5	1	4
Welland	J. W. Marshall	4	2	2
Wellington	J. J. Craig	23	7	16
Wellington	R. Galbraith	4	2	2
Wentworth	J. B. Robinson	34	14	20
York	C. W. Mulloy	9	7	2
York	A. L. Campbell	12	4	8
York	A. A. Jordan	27	23	4
Total, ungraded Public Schools		1358	836	522

Number of Separate Ungraded Schools with Classes in Agriculture, Sept., 1919—June, 1920

Inspectorate	Inspector	No. of Schools	Number of	
			Home Gardens	School Gardens
Bruce, Grey, Huron, Middlesex, Perth, Waterloo, Wellington	W. J. Lee	24	11	13
Manitoulin, Renfrew	J. M. Bennett	2	1	1
Addington, Frontenac, Northumberland, Peterboro, Renfrew and Victoria	J. P. Finn	10	4	6
Carleton, Stormont	J. E. Jones	5	5	.....
Halton, Peel and York	J. F. Power	3	3	.....
Essex, Kent, Lambton, Middlesex	J. F. Sullivan	8	.....	8
Essex	V. C. Quarry	1	1	.....
Total, ungraded Separate Schools		53	25	28

That agriculture as a subject of the Public School curriculum is having a powerful influence for good in the schools may be inferred also from the following statements taken from reports of the Public School Inspectors:—

This work is taken up in the four urban centres and in sixty-two rural schools. Three of the urban centres have School Gardens near to the school. In the other urban centre House Gardens are used.

House Garden Plots are mostly used in the rural schools.

Sixteen of the teachers have certificates in Agriculture.

Six School Fairs were held, at which the pupils exhibited the products of their gardens, the chickens they raised from eggs provided, the stock that they had handled and taken care of; also samples of Writing, Art Work, Sewing, Baking and Manual Training Work. There were also contests in public speaking, identification of weeds, and in stock and butter judging.

These Fairs create quite an interest in the community, and they serve to stir up a worthy pride in the pupils for their own rural life.

The trustees do not take advantage, to any great extent, of the grants to secure equipment and Agricultural books. If the teacher, however, is insistent and tactful all that is required may be got.

I am pleased to say that the interest in this subject is increasing.

WILLIAM IRWIN, I.P.S., North Perth.

There were forty-five schools in the rural part of my Inspectorate, and in thirty-nine of those agriculture was taught. In the urban portion there were six schools, each of which had a large garden. The work in urban school gardens was carried on quite successfully, exhibits were made at the County Fair and also at the Horticultural Exhibition. Besides giving pupils of each school an opportunity to study plant life carefully and its relation to environment each school kept a careful account of the cost of cultivation, fertilization and seed and also the amount received from the sale of produce. The sale of produce was so profitable in our urban schools that a considerable fund has been acquired for enlargement of school libraries, purchasing gramophones or any other equipment desired by the teachers of the school. In South Perth, we had four large township school Fairs at St. Paul's, Fullarton, Staffa and Shakespeare. We had no agricultural representative, but at each Fair we brought in men from other counties. We used the Fairs as annual Township Old Boys' Reunions and had public speakers of prominence try to take up some special phase of agriculture and give out knowledge on it to be put into practice for the ensuing year. As a whole, we are interesting the rural population through their schools and pupils to take a greater interest in school work and to study agriculture more than they did formerly. We also encourage stock judging contests, and contests in debates among schools of the township during the winter season. I am pleased to say we have had quite a successful year in agriculture.

J. H. SMITH, I.P.S., South Perth.

The statement is frequently made that the farmers themselves are more or less opposed to the teaching of Agriculture in the schools, offering as an argument that the school is not the place to learn Agriculture, and that this subject can be learned to better advantage in the homes and on the farm.

As this argument contains a germ of truth, it is not always easy to refute. However, as the subject itself, and the management of it, become better understood, the above mentioned argument dissolves of itself.

That the trustees are now understanding what is being done and appreciating the subject as one of real cultural value, are evident from the following statements taken from voluntary reports made by the trustees themselves.

The conclusions that may be reached from reading these reports may be summarized as follows: (1) The classes in Agriculture seem to interest the pupils in the work of the school; (2) the children co-operate with the teacher more readily than formerly in the management of the grounds and of the school itself; (3) many of the trustees foresee an awakened interest in farm problems and rural life.

In some cases, no doubt, the Agricultural Classes are not carried on as successfully as a person might wish, but the same may be said of any other subject on the curriculum. It is not to be wondered at if a few teachers do not make a brilliant success teaching Agriculture, because the subject is new and the teachers themselves have had very little experience with the subject either as pupils or yet as teachers.

Read the following statements from trustees:

S.S. No. 1, Verulam, Victoria Co., Garnett Thurston.

The garden has been a success, also the Agricultural topics taken up through the year have created a new interest amongst the pupils.

JOSEPH A. TULLY, *Secretary,*
Bobcaygeon.

S.S. No. 5, North Easthope, Perth Co., Miss E. Gordon.

I am instructed by the Trustees to say that the boys and girls are very much interested in their Home Plots, and also in the study of Agriculture.

E. GORDON, *Teacher.*
New Hamburg.

S.S. U. No. 3, Ellice, Fullarton and Downie, Perth Co., Ruby E. Schmidt.
In regard to the Agriculture carried on in this school I might say, I think the pupils derive certain benefits and are interested in the work, and I am quite satisfied that it be carried on to the extent it is at the present time.

JOHN F. ROHFRITSCH, *Sec. Treas.*,
Stratford.

S.S. No. 4, Mornington, Perth Co., Jean M. Krug.
Pupils are enthusiastic about the work. Miss Krug is capable and energetic. Under right instructors I think this branch of instruction will be of much value to the young generation.

DAVID J. JACOBS, *Sec. Treas.*
Newton.

S.S. No. 1, Chandos, Peterboro' Co., H. F. Maloney.
The pupils take great interest in work and talk about their plot at home. The garden looks well and is growing well. The plots are all clean of weeds. We think a school garden is a great incentive to pupils going to school.

JOHN MAHONEY, *Sec. Treas.*
Clydesdale.

S.S. U. No. 7, Blanshard and Nissouri, Perth Co., Olive Mossey.
The pupils take a very lively interest in their gardens. The work is done with the use of home tools. The preparation of the soil and fertilization is also done from home sources, which would mean considerable expense if done at school. We think the gardens are better cared for through the summer.

GEORGE McDONALD, *Sec. Treas.*
St. Mary's.

S.S. No. 9, East Zorra, Oxford Co., Grizzell R. Hart.
We see the need of Agriculture being taught, and will make a move to procure the necessary tools and equipment if the section will sanction it at our next annual meeting.
The teacher has certainly given the study a great impetus by her effort in the school and would indeed not like to see the work not continued.

W. V. CARTER, *Sec. Treas.*,
Woodstock.

S.S. No. 7, West Oxford, Oxford Co., D. A. Macdonald.
The School Garden has been carried on satisfactorily and the scholars take much interest in it. Some of the pupils had Home Gardens, which were inspected by the teachers, and cash prizes given.

W. H. CODY, *Sec. Treas.*,
Woodstock.

S.S. No. 9, Uxbridge, Ontario Co., Jessie I. Kerr.
In regards to the teaching of Agriculture the Trustees of this section are greatly in favour of it.

EDWARD A. HAYNES, *Sec. Treas.*,
Goodwood.

S.S. No. 2, Mara, Ontario Co., Lydia B. Smith.
On behalf of the Trustees, I must say we are all highly pleased with the results in Agriculture, and sincerely hope the good work will be continued.

THOS. WADDELL, *Sec. Treas.*,
Brechin.

S.S. No. 19, Cavan, Durham Co., Mary A. Deyell.
We, the Trustees, approve of the teacher's efforts in the teaching of Agriculture.

A. R. GILMOUR, *Sec. Treas.*,
Millbrook.

S.S. No. 21, Clarke, Durham Co., Hazel I. Clark.
Am glad to state that the Trustees and parents show a decided interest in the work initiated by our present teacher, Miss H. I. Clark, and we believe that under proper direction the work can be continued with increasing interest.

JOHN STEWART, *Sec. Treas.*,
Clarke.

S.S. No. 3, East Williams, Middlesex Co., Mabel Hord.
This year we have had trouble in getting seeds to germinate and our garden is not in as good condition as we left it last year.

DAVID CLUNESS, *Sec. Treas.*

S.S. No. 7, West Nissouri, Middlesex Co., Stella I. McLeod.

The school garden was planted under supervision of the teacher. It looks beautiful now. She has appointed two boys to look after it during the summer holidays. We are very much pleased with it.

FRED. LEE, *Sec. Treas.*,
Thorndale.

S.S. No. 5, Delaware, Middlesex Co., A. S. Ronald.

Pupils have made good progress in the study of Agriculture, and think it is a good thing to have taught in Public Schools.

Signed on behalf of Board.

J. H. MATTHEWS, *Sec. Treas.*,
Delaware.

S.S. No. 15, Caledon, Peel Co., Harvey A. Griffin.

There are fifty plots, divided among twenty-five pupils. The seeds used were gotten from the O.A. Department and are of various kinds, e.g., carrots, onions, beets, corn, potatoes, turnips, parsnips, flowers, wheat.

The garden is in a good healthy state, well weeded and artistically planned. The Board have employed a boy to take care of the garden during the holidays.

The pupils are very interested and the teachers have worked hard to make the garden a success.

Judging from appearances the result should be very gratifying.

W. A. DORRINGTON, *Sec. Treas.*,
Alton.

S.S. No. U1 and 2, Clinton and Louth, Lincoln Co., Winnie Booth.

At first scholars seem a little indifferent, but after seeing the result of their work they became quite interested and we believe it to be a good training.

A. H. CULP, *Sec. Treas.*,
Vineland.

S.S. No. U16, Tilbury West, Essex Co., Kathryne Baird.

We, the Trustees of S.S. No. 16, Tilbury West, Rochester and Mersea, hereby certify that the school garden shows careful preparation. The pupils all seem to be interested in the work, and the pupils and teacher alike have all worked hard to make it a success.

ORLEY FOSTER, *Sec. Treas.*,
Staples.

S.S. No. 1, Mersea, Essex Co., Mildred C. Hamil.

The work was carried on for the past year very successfully by our teacher. The grant for 1918-1919 was received in good time and was satisfactory.

W. W. LOVELESS, *Chairman.*
A. H. HICKSON, *Sec. Treas.*
Wheatley.

S.S. No. 4, Yarmouth, Elgin Co., Frances E. W. Futcher.

This is to certify that the teaching of Agriculture and Horticulture by Miss Futcher has been very satisfactory and very highly commendable.

C. S. SMITH, *Sec. Treas.*
W. F. SMITH, *Chairman.*
Sparta.

S.S. No. U6 and 7, Bayham and Malahide, Elgin Co., Gertrude A. Wigle.

The school garden has been inspected and found to be in fair condition, as the weather has been very dry this season.

H. G. MATTHEWS,
ADOLPHUS MCCONNELL, *Sec. Treas.*
Dunboyne.

S.S. No. 11, Winchester, Dundas Co., Myrtle Casselman.

The subject of Agriculture was well taught in our school and we are well pleased with it.

MAHLON CASSELMAN, *Sec. Treas.*,
Winchester R.R. No. 2.

S.S. No. 12, Matilda, Dundas Co., Vera P. Ellis.

The Trustees are well satisfied with the way Miss Ellis carried on her study of Agriculture.

GEORGE G. SHARRY, *Sec. Treas.*,

S.S. No. 6, Leeds and Lansdowne, Rear, Leeds Co., George W. Wheeler.

We are ready and willing to do all we can in promoting the teaching of Agriculture in our school, and think that our teacher, Mr. George Wheeler, is making a success of the work. We have not purchased any tools for carrying on the work, as the pupils furnish them from their homes, such as hoes, rakes, wheelbarrows, etc.

A. B. White, *Sec. Treas.*,
Lyndhurst.

S.S. No. 13, Plympton, Lambton Co., Flora C. Dennis.

We are planning to have a school fair in co-operation with No. 10, where we expect the children to exhibit the products of their home gardens. We also procured Barred Rock eggs, for which the pupils paid themselves, and we expect some keen competition among the chicks which they raise. We are also offering prizes for calves and several other things.

The children seem to be interested in farm subjects, and I think and hope it will be a means of stopping the exodus to the city.

Wm. Jardine, *Sec. Treas.*,
Camlachie.

S.S. No. 11, Culross, Bruce Co., Agnes M. Devereaux.

This school has won the shield for the last five years in the rural school fair.

William Cronin, Thomas Millen, Thomas Roswell.

S.S. No. 12, Kincardine, Bruce Co., Katie Campbell.

Having been present at our school when our teacher was instructing the children in Agriculture, I was much pleased in the way the pupils were interested in the subject.

Thos. R. Brocklebank.

S.S. No. 17, Mountain, Dundas Co., Ethel McDowell.

The Trustees will donate five dollars towards prizes, to be given at Rural School Fair.

Wm. Christie, *Sec. Treas.*,
Inkerman.

S.S. No. 2, Goulburn, Carleton Co., Myra E. Hodgins.

The school garden looks well and the pupils are taking quite an interest in it.

The Trustees have made arrangements to have the garden attended to during the summer holidays.

E. W. Garland, *Sec. Treas.*,
Richmond.

S.S. No. 11, North Gower, Carleton Co., Lillian I. B. Dool.

We have built a tool house this year and bought some new equipment. We have spent over the required sum of money in order to get flowers for the centre bed. It is a small ungraded school. The flower garden and vegetable garden are both looking well now.

Harry N. Moffatt, *Sec. Treas.*
North Gower.

S.S. No. 6, Osgoode, Carleton Co., Susie E. Scobie.

Re the school garden at No. 6 Osgoode. I have found the teacher and pupils very much interested in the work. I think the work both pleasant and profitable, and would not like to see the school without a garden.

F. S. Richardson.

I find a splendid garden at S.S. No. 6 Osgoode, and believe both children and teacher find it profitable. It is well cultivated and is a credit to the school.

E. M. Moses.

S.S. No. 12, Carrick, Bruce Co., Gertrude Siegner.

We found that the school garden is all right and great benefit to the children. It gives them pleasure to attend to the home gardens; at least they think they know all about Agriculture since they got the garden at school. We intend to have a garden right along.

Teacher's remarks:

I have always found the pupils very interested in this subject, also many of the parents who would sometimes send questions with their children for information—e.g., "How to treat oyster shell scale." Their interest was especially aroused when they got their school garden, and eagerly watched and waited for their vegetables to grow large enough to use. I think it is a subject well worth being placed on the curriculum.

Nicholas V. Schwarts, *Sec. Treas.*,
Mildmay.

S.S. No. 7, Amaranth, Dufferin Co., Hazel Henry.

Equipment was bought last year. The garden is looking fine.

Alex. Rintoul, *Sec. Treas.*,
Laurel.

The School Garden in the rural school is becoming an exceedingly important factor in agricultural instruction in the school. The difficulty which was once thought to be insurmountable, is rapidly being met from year to year. From the reports which have been received from Trustees here and there throughout the Province, the conclusion is easily reached that a school garden will become before long an essential factor of school accommodation in the future. In cases where new school grounds are to be secured, or school buildings to be located, attention should be given by Boards of Trustees to this very important part of the school accommodation.

Graded Public and Separate Schools

The Agricultural Instruction Act of 1912 provided funds for Agricultural education in the different provinces, and the small amount of this fund which was received by the Department of Education in Ontario was applied at first directly towards the work of rural schools, but it was soon observed that excellent work of a similar nature could be done in other schools—suburban schools especially. In 1917 the scope of grants was extended to include not only suburban but also urban schools. This aspect of the work has since developed very rapidly and, as a result of such development, a new view seems to be gaining ground to the effect that much good might arise in the direction of a better understanding between city and country, and possibly, later on, many of those pupils now studying Agriculture in the city schools may be led to take up their life work in the country.

Toronto has become a large city with an immense school population—so immense that the city can not properly provide accommodation for the pupils. How much better many of these city pupils would be if they were in a smaller municipality? When shall we get away from this religious worship of mere bigness? Ontario would be immensely better off with twenty cities of 40,000 each than with one of 800,000. Education may level this up to some extent in the future, and I believe that future history will show that Agriculture in the schools was one of the factors involved.

Among the very best school gardens which we have in Ontario, are those in suburban and urban localities, although, in many cases, the land made use of is not a part of the school property. The care of the garden during summer, which was thought six or seven years ago to be an insurmountable difficulty, does not appear to be so any longer. In fact the summer work when arranged for has a tendency towards developing in the pupils an added interest in the school. Moreover, the delight in growing things is one of the keenest of which the human being is capable, because it touches the spiritual as well as the economic quality of the human mind.

Number of Graded Schools with Classes in Agriculture, Sept., 1919—June, 1920

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Algoma	L. A. Green	4	3	1
Brant	E. E. C. Kilmer	4	3	1
Brant	T. W. Standing	1	.....	1
Bruce	W. F. Bald	1	1	.....
Bruce	John McCool	1	1	.....
Carleton, East	Thos. Jamieson	2	.....	2
Dundas	H. B. Fetterly	10	4	6
Elgin	J. C. Smith	6	2	4
Elgin	J. A. Taylor	7	1	6

Number of Graded Schools with Classes in Agriculture, September, 1919—June, 1920.—*Concluded.*

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Essex	D. A. Maxwell	1	1	
Frontenac	S. A. Truscott	1	1	
Glengarry	J. W. Crewson	3	2	1
Grey, West	H. H. Burgess	2		2
Grey, East	Robert Wright	1	1	
Haldimand	J. L. Mitchener	1	1	
Halton	J. M. Denyes	3	2	1
Hastings, South	H. J. Clarke	2	2	
Hastings, North	Jas. Colling	1	1	
Hastings, Centre	J. E. Minns	3	1	2
Huron, East	J. M. Field	1		1
Huron, West	J. Elgin Tom	3	1	2
Kenora	W. J. Hamilton	3	1	2
Kent, East	Rev. W. H. G. Colles	2		2
Kent, West	J. H. Smith	1	1	
Lanark, West	F. L. Michell	1	1	
Leeds & Grenville	J. F. McGuire	1	1	
Leeds & Grenville	W. C. Dowsley	2		2
Leeds & Grenville	T. A. Craig	1	1	
Lincoln	G. A. Carefoot	5	2	3
London, City	C. B. Edwards and V. K. Greer	7	5	2
Middlesex, East	P. J. Thompson	5		5
Middlesex, West	H. D. Johnson	1	1	
Muskoka	H. R. Scovell	1	1	
Ontario	R. A. Hutchison	1	1	
Ottawa, City	J. H. Putman and E. T. Slemon	13	1	12
Oxford	R. A. Paterson	1	1	
Oxford	J. M. Cole	4	2	2
Parry Sound, South	J. L. Moore	1		1
Parry Sound, East	R. O. White	1		1
Perth, North	William Irwin	3	1	2
Perth, South	J. H. Smith	6	1	5
Peterboro'	Richard Lees	1	1	
Peterboro, City	A. Mowat	2	1	1
Prescott & Russell	John Nelson	4	2	2
Prince Edward	F. P. Smith	3		3
Rainy River Dist.	C. McDowell	1	1	
Renfrew, North	I. D. Breuls	1		1
Renfrew, South	G. G. McNab	2		2
Simcoe, South	Edwin Longman	2	1	1
Simcoe, North	J. L. Garvin	2	2	
Stormont	James Froats	1	1	
Timiskaming	J. A. Bannister	3	1	2
Timiskaming	W. A. Wilson	1		1
Thunder Bay	John Ritchie	1		1
Waterloo, North	F. W. Sheppard	3	1	2
Waterloo, South	L. Norman	4	1	3
Welland, North	J. W. Marshall	2		2
Welland, South	Jas. McNiece	1	1	
Wellington, South	J. J. Craig	3		3
Wellington (Guelph)	Wm. Tytler	1		1
Wentworth	J. B. Robinson	7	1	6
Windsor	J. E. Benson	1	1	
York, North	C. W. Mulloy	3	1	2
York, East	A. A. Jordan	14	2	12
York, West	A. L. Campbell	4	1	3
Toronto	D. D. Moshier	1		1
Toronto	Walter Bryce	2		2
Toronto	A. E. Marty	1		1
Toronto	Normal Model School	1		1
Total, graded Public Schools		190	68	122

Number of Separate Graded Schools with Classes in Agriculture, Sept., 1919—June, 1920

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Brant, Bruce, Grey, Huron, Perth, Simcoe, Waterloo, Wellington	W. J. Lee	13	3	10
Brant, Elgin, Essex, Kent, Middlesex, Oxford, Welland, Wellington	J. F. Sullivan	13	7	6
Essex	A. Beneteau	3	1	2
Windsor City	John Waugh	2	.....	2
Peterborough, Simcoe	J. P. Finn	4	1	3
Renfrew, Thunder Bay	J. M. Bennett	4	2	2
Toronto, Lincoln	J. F. Power	8	3	5
Total, graded Separate Schools		47	17	30

The number of Public and Separate Schools qualifying for grants each year commencing in 1903 is given in the following table:—

Year	No. of Schools	Year	No. of Schools	With School Gardens	With Home Gardens
1903	4	1912	101	.....	.....
1904	7	1913	159	.....	.....
1905	6	1914	264	208	56
1906	8	1915	407	222	185
1907	2	1916	585	324	261
1908	14	1917	989	466	523
1909	16	1918	1,020	588	432
1910	17	1919	1,408	618	790
1911	33	1920	1,648	702	946

Until 1914, no distinctions were made in the reports respecting Home Gardens and School Gardens.

Amount distributed in grants to Public and Separate Schools for the school year 1918-19:

To Boards	$12,853 81
To Teachers	39,745 71
To Inspectors	9,149 00

Amount distributed in grants to Public and Separate Schools for the school year 1919-20:

To Boards and Teachers	$65,512 09
To Inspectors	11,359 00

Amount expended for Instruction:

Summer School, 1917, O.A.C. Instruction	$2,740 00
Summer School, 1918, O.A.C. "	4,874 25
Summer School, 1919, O.A.C. "	6,665 63
Summer School, 1919, Whitby "	1,189 50
Summer School, 1920, O.A.C. "	6,636 75
Summer School, 1920, Whitby "	1,910 75
Summer School, 1920, Monteith "	1,353 05
Summer School, Farm Mechanics, 1917, O.A.C.	402 00
Summer School, Farm Mechanics, 1918, O.A.C.	402 00
Summer School, Farm Mechanics, 1919, O.A.C.	475 00
Summer School, Farm Mechanics, 1920, O.A.C.	475 00

The fund set apart to be used to encourage the teaching of Agriculture in Ontario is administered as set forth in the following clause of the agreement between the Federal Government and the Province:

"To provide for and to encourage the teaching of Agriculture, Manual Training, as applied to work on the farm, and Domestic Science in High, Public, Separate and Continuation Schools and in Universities, to be available for grants, services, expenses and equipment, and travelling expenses of teachers, inspectors and others in attendance at Short Courses of other educational gatherings, and to be paid out on the recommendation of the Department of Education."

The Agricultural Instruction Act

Quoting from Dominion Sessional Paper 93, 1915:

"On the 6th of June, 1913, assent was given to what is known as the Agricultural Instruction Act, which thereupon came into operation. This Act, as stated by the Minister of Agriculture, was intended to be a prompt and complete fulfilment of a promise made by the Prime Minister that he would provide for 'the granting of liberal assistance to the provinces for the purpose of supplementing and extending the work of Agricultural education and for the improvement of Agriculture.'"

The Minister, in his introduction of the Bill, stated:

"Help given in an educational direction will mean not only better farming, but better farmers, and better and happier men and women. The particular form such assistance may take may vary with the special needs and conditions in each province. It will embrace the increasing of the efficiency and equipment of our agricultural colleges; the establishment of agricultural schools; of dairy and horticultural schools; of short courses in Agriculture; the initiation of agricultural teaching in the public schools; and work by travelling or located qualified instructors. It might well include the valuable educational work carried on by means of demonstration trains, training of teachers in nature study and the invaluable work of domestic science concerned with the women and girls of our communities, whose influence will always constitute one of the most potent forces in solving the problems we are considering."

Development of the Resources of Ontario

In order that the influence of the pupils and teachers of the schools might be used in the direction of a further development of the resources of the province the following leaflets were sent out to the inspectors and teachers. Greater Production and Reforestation are both needs at this critical time:

CIRCULAR TO INSPECTORS AND TEACHERS

FORESTRY DEVELOPMENT IN ONTARIO

Scarcity of timber, even in Ontario, is becoming more and more marked from year to year, especially in the older parts of the Province, where within the memory of many of us there was timber to burn, and, in many cases, the timber was destroyed wholesale without thought as to whether the land, when cleared, would be of value for agricultural purposes. Waste is no longer excusable. We must not only avoid wasteful methods; we must actually build up and restore. Timber is one of the most important of our resources as it contributes to the welfare of human beings in so many ways: buildings, implements, furniture, paper, fuel, pavements, etc.

In many places in Ontario reforesting on a small scale could be carried out through the agency of the school as part of the work in agriculture. Teachers should inspire the pupils with a love for trees by giving some practical lessons.

One objection offered to the planting of trees with a view to harvesting the crop is that the time of harvest seems so far on in the future. The answer to this is, that the man is a poor patriot, who cares little for the coming generations who does not aim to leave the world a little better than he found it. Moreover, the time of harvest need not be beyond one generation. Certain trees grow more rapidly than many people think: Black Locust often reaches 16 inches in diameter in 30 years; American Elm, 18 inches in 40 years; Soft Maple and Basswood, each 16 inches in 35 years.

It is recommended that teachers post themselves to a certain extent, and by securing co-operation with Boards of Trustees, make a beginning at once. Where land

is not costly a small arboretum might be laid out. Refer to page 154 of the Manual of Elementary Agriculture and Horticulture.

It is not intended that the efforts put forth for food production should be relaxed in 1920, as the prevailing high prices indicate a scarcity of food. During 1919 from the reports received at the Department of Education it is calculated that the value of food products resulting from the efforts of the schools reached $150,000. This splendid showing can easily be maintained in 1920, and at the same time a beginning made in schools to extend the work in practical reforestation.

Toronto, February 4th, 1920.

TO THE TEACHERS OF THE PUBLIC AND SEPARATE SCHOOLS IN ONTARIO

GREATER PRODUCTION FOR 1920

The Public or Separate School Inspector Will Distribute These Leaflets to the Teachers Concerned.

By an arrangement with the Poultry Department at the O.A.C., Guelph, eggs for hatching can be supplied to schools in which classes in Agriculture are maintained in a limited quantity at 6 cents each f.o.b., at shipping point, in lots from one dozen up to 200 for each school. The eggs are from an improved Barred Rock bred-to-lay strain, and the introduction of this breed into the rural districts is likely to prove of lasting benefit to the whole country.

If the teachers are willing to take this matter up in connection with their classes, they should communicate with Professor Graham at the O.A.C., Guelph, and secure at one shipment the number of eggs required for their schools. Remit in advance to Professor W. R. Graham, Poultry Department, O.A.C., Guelph.

The Poultry Department of the O.A.C. maintains a number of breeding stations among the farmers. These flocks were started from eggs direct from the Department and are inspected and culled. The males used come from the Department and are from the very best tested hens. It is felt that in this manner a high standard may be maintained and that it is the only way such a large number of eggs can be secured in so short a space of time.

In order that the eggs may be available for the largest number of children, it is understood that the teacher will not give a pupil more than two dozen and that each school will not order more than 200.

Experience has shown that of the thousands of eggs sent out in past years about one half produce chicks. This is not a very large percentage, but is fairly good when one considers how the eggs are handled by the Express Companies, the time occupied in transportation, and the peculiarities of a setting hen.

The eggs will be packed in such a manner that in each layer in the case there will be eggs from every flock. This assures not only a better average hatch, but gives the child an opportunity of having cockerels and pullets but slightly related.

It is suggested that part of the cost (say one-half) be borne by the School Board and part by the pupils, thus placing the cost to the pupil at so reasonable a figure that the project will be within reach of all. The part of the expense borne by the School Board may be charged to the agricultural account (Regulations 7 and 8, pages 6-8, Circular 13, 1919), as the hatching of eggs and rearing of the brood is a legitimate and useful home project for a pupil of the third, fourth or fifth form. About 25,000 eggs were distributed under a similar arrangement in 1919.

Toronto, January 29th, 1920.

School Fair organizations continue to do exceedingly important work in the rural schools. These organizations are under the charge of the Agricultural Representative, in co-operation with inspectors and teachers. Perth is now the only county without a representative.

For the information of teachers and inspectors the following list, correct to January 1st, 1921, is given below:

Agricultural Representatives of the Ontario Department of Agriculture

County	*Representative*	*Address*
Algoma	J. M. McIntosh	Sault Ste. Marie.
Brant	R. Schuyler	Paris.
Bruce	C. Lamont	Walkerton.
Carleton	D. J. Matheson	Carp.
Dufferin	H. A. Dorrance	Orangeville.
Dundas	W. C. Caldwell	Morrisburg.
Durham	F. C. Paterson	Port Hope.
Elgin	C. W. Buchanan	Dutton.
Essex	J. W. Noble	Essex.
Frontenac	A. W. Sirett	Kingston.
Grenville	W. M. Croskery	Kemptville.
Glengarry	D. E. MacRae	Alexandria.
Grey	T. S. Cooper	Markdale.
Haldimand	C. A. Galbraith	Cayuga.
Halton	R. R. Fleming	Milton.
Hastings	A. D. McIntosh	Stirling.
Huron	S. B. Stothers	Clinton.
Kent	J. L. Dougherty	Chatham.
Kenora	M. F. Cook	Kenora.
Lambton	W. P. Macdonald	Petrolia.
Lanark	Fred Forsyth	Perth.
Leeds	W. H. Smith	Athens.
Lennox and Addington	C. C. Main	Napanee.
Lincoln	Geo. Wilson	St. Catharines, Box 107.
Manitoulin	I. F. Metcalf	Gore Bay.
Middlesex	R. A. Finn	London.
Muskoka & Parry Sound	R. S. Beckett	Huntsville.
Norfolk	E. F. Neff	Simcoe.
Northumberland	H. Sirett	Brighton.
Ontario	R. M. Tipper	Uxbridge.
Oxford	G. R. Green	Woodstock.
Peel	J. A. Carroll	Brampton.
Peterborough	F. C. McRae	Norwood.
Prince Edward	A. P. MacVannel	Picton.
Prescott and Russell	F. Larose	Plantagenet.
Rainy River	R. E. Cumming	Emo.
Renfrew	M. H. Winter	Renfrew.
Simcoe	A. Hutchinson	Barrie.
Sudbury	D. J. Robicheau	Sudbury.
Timiskaming	W. G. Nixon	New Liskeard.
Thunder Bay—		
Port Arthur Section	L. M. Davis	Port Arthur.
Fort William Section	G. W. Collins	Fort William.
Victoria	A. A. Knight	Lindsay.
Waterloo	J. S. Knapp	Galt.
Welland	R. J. Bryden	Welland.
Wellington	R. H. Clemens	Arthur.
Wentworth	W. G. Marritt	Hamilton, 18 Market St.
York	J. C. Steckley	Newmarket.

HIGH SCHOOLS

As the High Schools are, as a matter of fact, the real source from which teachers are derived, the influence of these schools is paramount in so far as the supply of suitable teachers may be concerned. By the term "High Schools" is meant all secondary schools, whether they be called Continuation Schools, Collegiate Institutes, High Schools or Private Schools, carrying on High School work. The course taken in the High School is largely a determining factor as to whether the student eventually becomes a teacher or not, consequently one of the causes of the

shortage of teachers has its roots in the course of study of the High Schools. And, because of the dominating influence of the University in its requirements for matriculation to the various branches of college work leading to a degree, the course of study in High Schools is shaped largely by the Universities. The language requirements for matriculation make so large demands upon the time of the pupil while in the High School that the student finds himself unable, for lack of time and energy, to carry on a course which includes Agriculture or Household Science.

The American State Universities make it possible for a student to offer Agriculture as a part of his matriculation course. This is true also of other subjects not recognized by our Provincial Universities. And none of these State Universities require Latin as an essential subject for admission. The American Universities are, therefore, open to a larger class of students, and have a more extensive sphere of influence than ours in Ontario.

To a degree in Arts the admission requirements in the State Universities of Michigan, Wisconsin, Minnesota and Illinois, are approximately the same, and, in a general way, about as follows: Fifteen credit units are necessary for admission and these credits are to be made up of, 3 in English, 2 in Mathematics, 2 in a Foreign Language, 1 in Science, and 4 of the remaining seven must be selected from a group composed of English, Greek, Latin, French, German, Spanish, History, Algebra, Geometry, Trigonometry, Physics, Chemistry, Botany, Zoology, Physiology, Geography. Three more may be selected from vocational subjects such as Agriculture and Household Science.

The progress of the work in the Secondary Schools is indicated by the following table, which shows when the work was introduced and how long continued. The word "Yes" means that the work was carried on successfully through that term, and the word "No" indicates that the work was temporarily dropped. The reason assigned in each case for dropping the subject was because of the impossibility of securing a legally qualified teacher to teach Agriculture:

Schools	1919		1920	
	January-June	September-December	January-June	September-December
Collegiate Institutes—				
Brockville	yes	yes	yes	yes
Clinton	no	yes	yes	yes
Ingersoll	yes	yes	yes	yes
London	yes	yes	yes	no
Renfrew	yes	yes	yes	yes
Smith's Falls	yes	yes	yes	no
St. Thomas	yes	yes	yes	yes
Vankleek Hill	yes	yes	yes	no
High Schools—				
Arthur	yes	yes	yes	yes
Athens	yes	yes	yes	yes
*Beamsville	.....	yes	yes	yes
Belleville	.....	yes	yes	yes
Bowmanville	no	yes	yes	yes
Cobourg	yes	yes	yes	yes
Essex	no	yes	yes	yes
Georgetown	no	yes	yes	no
Kincardine	yes	yes	yes	yes

*Separate Department of Agriculture.

Schools	1919		1920	
	January-June	September-December	January-June	September-December
High Schools.—*Con.*				
Leamington	yes	yes	yes	yes
Niagara Falls S.	yes	yes	yes	yes
*Oakville	yes	yes	yes	yes
Port Hope	yes	yes	yes	yes
*Port Perry	yes	yes	yes	yes
Whitby	yes	yes	yes	yes
Williamstown	no	yes	yes	yes
Winchester	yes	yes	yes	yes
Wingham	yes	yes	yes	no
Continuation Schools—				
*Drayton	yes	yes	yes	yes
New Liskeard	yes	yes	yes	yes
Port Colborne	.....	yes	yes	no
Ridgeway	yes	yes	yes	yes
Public Schools with Form V—				
Swansea, York County	.....	yes	yes	no
Thamesville, Oxford County	.....	yes	yes	yes

* Separate Departments of Agriculture.

Under the heading " remarks " on the annual report submitted by the teachers who are carrying on classes in agriculture, the following quotations indicate something of the practical nature of this work. Agriculture has at present only the standing of a bonus subject:

The garden proved a great success. The pupils sold potatoes and turnips, and gave away, or used, corn, beets, onions, beans, turnips, and other garden produce. The pupils like the work in agriculture very much and entered enthusiastically into it. Only five or six pupils in all of the Lower School did not take agriculture.

F. E. Foulds, *Teacher of Agriculture,*
Clinton Collegiate Institute.

School plots and experiments:

Four of the home gardens plots were graded over 80% by the agricultural inspector. The carrot plot yielded at the rate of 870 bushels per acre.

Sweet corn which was sprouted before planting was ten days earlier than that planted dry and grew better—larger ears and more of them.

Difficulty:—To make the work practical.

Encouragements:—People are becoming interested in this subject.

Jas. E. Burchell, *Teacher of Agriculture,*
Athens High School.

The school plot was a most successful one this year. We not only raised a large quantity of corn, tomatoes and other vegetables, including ten bushels of potatoes, but we cleaned the land of quack grass and other weeds. We sold about $15 worth of corn after the hospital had been supplied with all they wanted.

J. A. Anderson, *Teacher of Agriculture,*
Brockville Collegiate Institute.

School Experiments.

Four areas amounting to about one-eleventh of an acre were planted to potatoes. This area yielded at the rate of 283.5 bushels per acre, and, based on market prices, the return was at the rate of $265.65 an acre, at an expenditure of $157.50 per acre, leaving a profit of $108.15 per acre. The actual cost last year of the school plot was $77.18.

The value of the returns, a part of which was cash, was $136.15, making a profit of $58.34 on half an acre had the produce been sold. The methods used were expensive and intensive, thirteen loads of manure and chemical fertilizers in addition. This shows, however, that the methods advocated in the class-room will work out in practice.

Poultry experiment: In October, 1919, twenty-one pullets were secured at a cost of $32.00: feed to December 1st cost $11.40; feed from December 1st to June 1st cost $25.20. The total cost was $68.60. Eggs produced from December 1st to June 1st, when the pen was broken up, were 1,140, which gave a cash return of $56.82, every egg being sold. Many of the eggs were sold to the principal and to the vice-principal of the school. The highest price paid was 75 cents a dozen. The birds were sold in June, some to each of several pupils, the others to a dealer, bringing $24.56, and making a total return of $81.38. On the whole transaction returns over cost of birds and feed were $12.78. This gives no allowance for labour nor capital, but it does show that people in town might buy ten pullets in the fall, have fresh eggs all winter, and sell the birds in spring and show profit over cost of feed and outlay.

NORMAN DAVIES, *Teacher of Agriculture,*
Renfrew Collegiate Institute.

The chief difficulty in introducing and in maintaining classes in Agriculture in the Secondary Schools is the lack of legally qualified teachers.

The number of High Schools qualifying for grants since 1915 are here given:

—	No. Schools	With Plots	No Plots	—	No. Schools	With Plots	No Plots
1915				1918			
January-June	11	.....	11	January-June	21	16	5
September-December	15	.....	15	September-December	26	18	8
1916				1919			
January-June	15	1	14	January-June	23	16	7
September-December	20	1	19	September-December	30	23	7
1917				1920			
January-June	20	7	13	January-June	32	29	3
September-December	21	7	14	September-December	25	24	1

Courses are provided at the Ontario Agricultural College covering two consecutive summers of five weeks each. These courses were introduced in 1913, and the number of teachers who have so far qualified each year for an Intermediate Certificate in Agriculture are given below:

1914, 12; 1915, 10; 1916, 15; 1917, 15; 1918, 9; 1919, 21; 1920, 25.

Below are the names of those teachers who qualified in 1920:

Aitcheson, Edna M.
Armstrong, Thos. W., B.A., Queen's.
Attwood, Albert E., M.A., Queen's.
Bailey, Gertrude, M.
Beatty, Stanley.
Cameron, Allan A.
Cosgrave, Jas. E.
Delaney, Annie M.
Edge, Alex. M.
Gilchrist, John, B.A., Queen's.
Haines, F. L.
Isard, Viola M.
Lawlor, Richard G., B.A., Queen's.
Leitch, Alex. G., B.A., Queen's.
Maxwell, Thos. P.
Pow, Arthur W.
Preston, Thomas, B.A., Toronto.
Spence, J. C., B.A., Queen's.
Smithendorf, Herbert.
Tanton, John, B.A., Queen's.
Tranter, Hazel M.
Waddell, K. T., B.A., Queen's.
Welsh, R. Stanley.
Wilkinson, Jas. E., B.A., Toronto.
Willson, Alice, B.A., Toronto.

FARM MECHANICS

Year.	Number.	Year.	Number.
1917	10	1919	10
1918	9	1920	8

The list of those who received certificates for Farm Mechanics in 1920 is as below:

Bodkin, Gertrude L., B.A., Western.
Campbell, R. J.
Howard, Frances.
Joynt, James H.
Learoyd, Clarence W., B.A., Toronto.
Miller, Gideon A., M.A., Queen's.
Mitchell, Will James.
Wood, Elmore E., M.A., McMaster.

SUMMARY, INCLUDING FARM MECHANICS

Queen's	55
Toronto	23
McMaster	13
Western	3
Victoria	3
With University Degrees	97
Without Degrees	57

The Names and Addresses of Public and Separate School Inspectors who hold Intermediate Certificates in Agriculture

Bald, W. T., Port Elgin.
Bannister, John A., New Liskeard.
Bennett, J. M., Toronto, 694 Euclid Ave.
Benson, J. E., Picton.
Bryce, W., Toronto.
Boyes, Robert, Campbellford.
Broderick, G. E., Lindsay.
Burgess, H. H., Owen Sound.
Campbell, A. L., Weston.
Carefoot, George A., St. Catharines.
Christie, D. M., Sudbury.
Clarke, H. J., Belleville.
Cole, J. M., Woodstock.
Colles, W. H. G. (Rev.), Chatham.
Colling, James, Bancroft.
Corkill, E. J.
Coun, Henry, Sarnia.
Cook, H. F., Simcoe.
Craig, J. J., Fergus.
Craig, T. A., Kemptville.
Crewson, J. W., Alexandria.
Day, Isaac, Orillia.
Denyes, J. M., Milton.
Dowsley, W. C., Brockville.
Ferguson, T. R., Uxbridge.
Fetterley, H. B., Winchester.
Field, J. M., Goderich.
Finn, J. P., Britannia Bay.
Froats, James, Cornwall.
Galbraith, Robert, Mount Forest.
Galbraith, W. J., Brampton.
Garvin, J. L., Barrie.
Green, L. A., Sault Ste. Marie.
Hagan, J. W., Gore Bay.
Hamilton, W. J., Fort William.
Huff, Samuel, Meaford.
Irwin, William, Stratford.
Jamieson, Thomas, Ottawa.
Johnson, H. D., Strathroy.
Jones, Jas. E., Ottawa.
Jordan, A. A., Toronto, 63 Orchard View Blvd.
Kilmer, E. E. C., Brantford.
Lee, W. J., Toronto, 434 Brunswick Ave.
Lees, Richard, Peterborough.
Liddy, W. R., Orangeville.
Longman, E., Barrie.
Marshall, J. W., Welland.
Marty, Miss A. E., Toronto.
Michell, F. L., Perth.
Minns, J. E., Tweed.
Mitchener, J. A., Cayuga.
Moore, J. L., Parry Sound.
Moshier, D. D., Toronto.
Mulloy, C. W., Aurora.
McCool, John, Walkerton.
McDougall, N., Petrolia.
McGuire, J. F., Westport.
McNab, G. G., Renfrew.
McNeice, James, Welland.
Nelson, John, Vankleek Hill.
Norman, Lambert, Galt.
Odell, J. W., Cobourg.
Paterson, R. A., Ingersoll.
Pentland, G. E., Fenelon Falls.
Power, J. F., Toronto.
Reid, M. R., Sharbot Lake.
Ritchie, John, Port Arthur.
Robinson, J. B., Hamilton.
Rose, R. C., Carleton Place.
Standing, T. W., Brantford.
Scovell, H. R., Bracebridge.
Sheppard, F. W., Kitchener.
Slemon, E. T., Ottawa.
Smith, F. P., Picton.
Smith, J. C., St. Thomas.
Smith, J. H., Chatham.
Smith, Jas. H., Stratford.
Snider, E. E., Port Hope.
Stevens, W. H., Lindsay.
Sullivan, J. F., London.
Taylor, J. A., St. Thomas.
Thompson, P. J., London.
Tom, J. E., Goderich.
Truscott, S. A., Kingston.
White, R. O., Minden.
Wright, Robert, Hanover.

Specialist's Certificate in Agriculture

The following, whose names are given below, have completed the course prescribed for Specialist standing in Agriculture and have submitted acceptable Theses:—

J. G. Adams, B.A., Queen's.
G. E. Copeland, M. A., Queen's.
A. R. McRitchie, B.A., Toronto.
F. P. Smith, M.A., Queen's.
G S. Johnson, B.A., McMaster.

THE NORMAL SCHOOLS

As the classes in certain Normal Schools now include students preparing for positions in Continuation Schools, some consideration is being given to the needs of such schools respecting the teaching of Agriculture. When students of similar qualification, took their professional training under the Faculty of Education of the University, no practice teaching or instruction was given in Agriculture, consequently, so far as this subject was concerned, those teachers who attended the Normal Schools were better prepared to teach this subject.

Until plant houses are provided for the Normal Schools as a part of the laboratory accommodation to be used in connection with the teaching of Agriculture in these schools, the best results need not be expected.

Notwithstanding the fact that excellent courses in Agriculture—as far as can be given with the limited accommodation—are now being given in the Normal Schools, we can never hope to meet the needs of the Public Schools until the High Schools undertake the work as an essential part of the curriculum for teachers. This can be done only by providing for Agriculture as a regular subject on the High School Course of Study.

Teachers of Agriculture in the different Normal Schools

Hamilton	G. O. McMillan, M.A., B.Pæd., Queen's.
London	G. W. Hofferd, B.A., Queen's.
North Bay	H. E. Ricker, M.A., Queen's.
Ottawa	G. A. Miller, M.A., Queen's.
Peterborough	A. J. Madill, B.A., McMaster.
Stratford	J. W. Emery, B.A., D.Pæd., Toronto.
Toronto	David Whyte, B.A., Toronto.

All these men hold Intermediate Certificates in Agriculture.

The schools affiliated with the Normal Schools are given in the following list. These schools have all made a good start and it is hoped that efforts for advancement of such schools may be fostered and encouraged in every possible way. It is also hoped that some of these schools may, in the near future, become centres of consolidation.

Schools Affiliated							Teacher of Affiliated School				
Normal School	Section No.	Township	Date of affiliation	Miles from Normal	Secretary	P.O. Address	Name of Teacher	Cert.	Certificate in Agricul.	Salary from Board	Salary from Dept.
Hamilton	5	Barton	Sept.,1916	2	Dr. J. H. Holbrook	Mt. Sanitorium.....	Annie E.Woods..	I	Elem.Cert.	$ 900	$300
		Burlington Beach	"	6	Burlington B. Commission, room 800, Bank of Hamilton	Hamilton	M. Merle Prentice	I	No Cert.	1,000	300
	U3	W. Flamboro & Ancaster	Sept.,1918	6½	W. H. Brooking.....	R.R. 3, Dundas.....	Deane Whitson..	I	[Inter. Pt. I, 1918	950	300
London.....	7	Westminster	Sept.,1916	4½	R. T. Baty.....	R.R. 1, Wilton Grove..	FlorenceKennedy	II	Elem.Cert.	1,000	300
	21	London	" 1920	5	R. Waide	London	May Beckton....	II	Elem.Cert. Pt. I	1,000	300
	22	"	" 1918	4	R. Dengate.....	Ealing.....	Helen Paterson.	II	Elem.Cert.	800	300
North Bay...	5	Widdifield ..	Sept.,1916	9	W. J. Simmens.....	Feronia	J. B. Marshall...	II	No Cert.	1,000	300
	1B	Ferris	"	2	James Pasmore	North Bay.....	Vina Fennell....	II	"	950	300
Ottawa.....	3	Gloucester ..	Sept.,1916	4½	J. A. Beamish	Billing's Bridge.....	Mary C. Douglas.	II	Elem.Cert.	900	300
	10	"	" 1919	3	J. Woods	Hurdman's Bridge.....	A. Cummings ...	II	Elem.Cert. Pt. I	900	300
	12	Nepean	" 1919	5	W. P. Jackson.....	City View.....	Frances A. Scott	II	Elem.Cert.	900	300
Peterborough.	3	Smith	Sept.,1916	3	Percy Edmison.....	R.R. 2, Peterborough ..	Helen Alexander.	II	Elem.Cert.	775	300
	5	"	"	6	G. D. Mann	Bridgenorth	Florence Hubbel.	II	"	1,000	300
	6	Otonabee ...	"	3	Alex. Huston.....	R.R. 11, Peterborough .	Phyllis Borland.	II	"	900	300
Stratford	3	Downie	Sept.,1909	5½	Louis Goettler	Sebringville	G. MacKenzie...	II	E. Cer. P. I	750	300
	U10	S. Easthope.	" 1919	7½	H. Harloff	R.R. 4, Stratford.....	N. Beaumont....	II	Elem.Cert.	900	300
	9	Downie.	" 1916	7½	Robert Bell.....	R.R. 5, St. Mary's.....	Margt. McCully.	II	"	1,000	300
Toronto.....	1	King & Whitchurch....	Sept.,1918	20	Fred. J. Legge	Oak Ridges ..... "Hawthorn Min.Sp'gs."	John H. Stubbs..	II	No Cert.	800	300
	10	Etobicoke...	Sept.,1919	13	Henry Barker	R.R. 3, Weston	Eva W. Nattress	I	Elem.Cert.	1,000	300
	7	Etobicoke...	Sept.,1919	15	William A. Wallis	R.R. 3, Weston.....	HelenB.Williams	II	"	800	300
	3	York	Sept.,1920	6	E. F. Wood	Postal St'n. 'K,' Toronto	Dor. E. Jacques.	II	No Cert.	1,000	300

SUMMER COURSES

Because of the fact that Agriculture is not yet a regular subject on the High School curriculum, summer courses are necessary. The attendance upon these Summer Courses in Agriculture for Teachers is rapidly increasing from year to year. Up to 1918, the Ontario Agricultural College, was able to provide for all those teachers who applied for admission. In 1919, an arrangement was made to provide a course at the Ontario Ladies' College, Whitby. This was continued in 1920. In 1920, a similar arrangement was made for a course at the Demonstration Farm, Monteith. Details are given further on in this report.

In many respects these courses in agriculture for teachers are the most important and far reaching of all the agricultural courses given in Ontario, because, through the teachers, they have much to do with the shaping of the minds of the rising generation in such a way as to develop a mental attitude more in harmony with rural conditions. Not only do these courses so direct the rural mind at an early age and thereby produce lasting impressions, but they assist materially in showing how the farms may be made more productive and therefore more profitable, thus providing the economic incentive necessary for a happy life on the farm.

Accommodation in residence at the College could not be arranged for all, consequently only the ladies were provided with rooms and board on the grounds. The men were obliged to secure their own board and rooms at private houses, chiefly in the city. The new dormitory building now approaching completion will be available in 1921, consequently all those who attend the summer courses at Guelph will likely, hereafter, be accommodated in residence at the College. One of the important advantages of these summer courses is the privilege of partaking, to a certain extent, of college life by living in the dormitories and dining in the hall, and these advantages are not among the least important.

The instruction is given by the College Professors and other members of the staff, and relates directly to the teaching of agriculture in the schools. The Elementary classes refer directly to the Public and Separate Schools and the Intermediate classes to the High Schools.

The work is made as practical as it is possible to make it and those in attendance appreciate this feature, more particularly because practically all of the scholastic education obtained by the teachers in their previous courses of training, had to do with books. It should also be pointed out that the courses are truly courses in Agriculture and not Nature Study.

In addition to the regular courses, special lectures were given to all of the classes in attendance by President Reynolds, Dr. Eric Clark and Professor Crow.

The attendance since 1911 is given in the following table, that in 1918 and 1919 being especially large on account of the attendance of Inspectors:—

Attendance at the Ontario Agricultural College Summer Courses in Agriculture, 1911-1920

Year	Elementary				Intermediate					Inspectors		Farm Mechanics	Total
	I		II		I		II		III	I	II	—	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	—		—	
1911	8	75	1	16	....	.....	....	.....	....	.....		.....	100
1912	16	65	2	23	....	.....	....	.....	....	.....		.....	106
1913	14	64	5	36	23	4	....	.....	....	.....		.....	146
1914	8	55	5	27	13	4	14	.....	....	.....		.....	126
1915	15	39	5	18	17	1	9	1	....	.....		.....	105
1916	11	99	9	31	15	3	14	1	....	.....		.....	183
1917	15	138	7	81	9	1	13	2	....	.....		10	276
1918	6	187	7	119	20	11	9	.....	9	79		9	456
1919	16	155	6	160	9	19	7	21	....	86		10	489
1920	28	125	10	135	7	25	19	7	....	8		10	374

A glance at the above table will show that, since 1915, a marked progress has been made with respect to the attendance, even after the number of those taking the Inspectors' Course has been subtracted.

A considerable number of those who enter Part I of the Course leading to an Elementary certificate, for some reason or other do not complete the course by taking Part II. The following figures show the percentage of shrinkage and concerns the classes at Guelph only:—

Year	Number taking Part I Elementary	Year	Number completing Part II Elementary the following year	Decrease per cent.
1911	83	1912	24	71
1912	81	1913	41	50
1913	76	1914	32	58
1914	63	1915	23	63
1915	54	1916	40	26
1916	100	1917	88	12
1917	158	1918	126	20
1918	193	1919	166	14
1919	171	1920	145	15

Attendance at the Whitby Ladies' College Summer Courses in Agriculture, 1919, 1920

Year	Part I Elementary	Part II Elementary	Total
1919	70	..	70
1920	69	46	115

Attendance at the Demonstration Farm, Monteith, Part I Elementary, 1920

1920	22

SUMMER COURSE AT WHITBY

(By G. S Johnson)

There were 115 pupils in attendance at the second Summer School in Agriculture held at the Ontario Ladies' College, Whitby—sixty-nine in Part I and forty-six in Part II. Practically all of the students of the previous year returned to take up their second part, but the attendance of the first part was not quite as large as was anticipated, due, no doubt, to the fact that territory from which the teachers were drawn the previous year was this year served by a similar course held at Monteith.

Due to the fact that both the first and second year work leading to the Elementary Certificate in Agriculture were being taken, it was necessary to have a staff somewhat larger than the previous year. The staff was as follows:—

George S. Johnson, B.A., Principal, Whitby High School.
Norman E. Davies, B.A., Renfrew Collegiate.
George McMillan, B.A., Hamilton Normal School.
J. G. Adams, B.A., Beamsville High School.
J. A. Short, Swansea.
R. M. Tipper, B.S.A., Whitby.

Misses Wallace and Holland of the Ontario Ladies' College, Whitby had charge of the teachers in residence.

One of the outstanding features of the Summer Course was the school gardens. This department was a splendid success and this success may be due to the fact that the garden was prepared and planted on the afternoon of the arrival of the students and the lessons in gardening evolved from the garden while growing. This method is much more satisfactory than taking a series of lectures on gardening and then having the pupils go out and make their garden.

During the course several outside lecturers visited the school; among these might be noted, Professor Harcourt, of the O.A.C., Guelph, Professor Henry G. Bell, of the Soil and Crop Improvement Bureau, Toronto, and Miss Lane and assistant, who gave demonstrations on value of music in the school and folk dancing.

Visits were made to neighbouring farms to inspect the apiaries, etc., to the Hospital for the Insane, and to the various schools of the district where school-gardens and school-ground improvement work were being successfully carried on. These latter excursions afforded the teachers who took advantage of them an opportunity to see what was being done along this line by other schools. If more teachers would make a point to visit other schools carrying on similar work more interest might be given to this side of the agricultural teaching. Too often they are satisfied to carry on the work without reference to any other locality.

Over one hundred teachers in attendance took advantage of an excursion to the O. A. College, Guelph. They were met at the station by representatives from the Summer School at the O.A.C., with special cars, and conducted to the College where a splendid programme of sight-seeing trips about the farm and sports was enjoyed. The day closed with a large picnic on the lawn.

As in the previous year, the teachers applied themselves most diligently and took an active part in all work, whether it was in class-room, garden or campus.

THE SUMMER SCHOOL IN AGRICULTURE, MONTEITH

(By H. E. Ricker)

As it was found that few of the teachers of Northern Ontario were attending the Summer Schools at Guelph or Whitby, the Department thought that if a Course were held at some place in the north many more of these teachers might take advantage of the opportunity of becoming qualified in Elementary Agriculture. With this in view, letters were sent to the teachers concerned asking them if they would attend a course at Monteith if one were established. Over sixty intimated their intention of attending, and these submitted the names of about thirty others who, they thought, might be interested.

Accordingly arrangements were made to conduct a School at the Monteith Demonstration Farm of the Department of Agriculture, using the "College" built for soldiers' re-establishment work of the Ontario Government. This location was particularly suitable, as the whole of the resources of the farm were available for practical work, and the "College" for lectures and laboratory work, and as a residence.

The staff and subjects taught were as follows:—

H. E. Ricker, M.A., Science Master of the Normal School at North Bay. Mr. Ricker was Principal and taught the Horticulture, Soils, Weather, and Methods.

Miss I. E. Dobbie, Principal of the Continuation Class at New Liskeard. Miss Dobie taught the Dairying, Poultry-raising, and Floriculture, and had oversight of the accommodation for the students.

Mr. F. E. Foulds, B.Sc.Agr., Science Master at the Collegiate Institute, Clinton. Mr. Foulds took charge of the Botany and Entomology, and shared with Mr. Ricker the School Garden work and Games.

Mr. L. H. Hanlan, Superintendent of the Demonstration Farm, Monteith. Mr. Hanlan taught the Field and Animal Husbandry, and assumed the general management of the grounds and building, the hiring of the necessary helpers, the purchase of supplies and other such matters, contributing much to the successful carrying on of the Course.

The attendance was smaller than anticipated. The Department decided that owing to the nature of the accommodation it would be unwise to admit male students, and this doubtless helped to lessen the number, but just why so many failed to come whose names were on the tentative list has not been explained. The enrolment was twenty-three, the students coming from widely separated places: from Rainy River District, Port Arthur, Sault Ste. Marie, Manitoulin Island, North Bay, and many intervening points on the C.P.R., and along the G.T.R. and T. & N. O. lines from Barrie to Porcupine.

It is hoped that this year's class will be missionaries, and bring back with them in 1921, so many students as to tax the capacity of the building.

Accommodation

Three of the staff and all of the teachers-in-training were lodged and boarded in the building erected on the Demonstration Farm and formerly used in connection with the Soldiers' Re-establishment Work of the Ontario Government.

Two large dormitories accommodated the students, each dormitory being divided, by means of curtains, into compartments containing about three beds each.

The meals were taken in a large, bright, airy dining-hall, and the food provided was excellent in quality and variety and was well prepared and served.

Another large room was set aside for reading and recreation, and was provided with a piano, victrola, cases of books, and other equipment. This room also had a fine large fireplace, which was lighted on cool mornings or evenings, and added to the cheer and comfort of the students. On occasion, the teaching was done in this room, though there was also a regular class-room on the second floor, and a laboratory in the basement.

The Course

The subjects of the Course (Part I Elementary) were exactly the same as those of the same Course given in Guelph and Whitby. The details varied, however, to suit the locality and needs of the north country.

In Field Husbandry, the instructor gave a lecture and demonstration on land clearing and the ways of making early use of the new land. The class was taken out to an uncleared portion of the farm, and shown how it is logged, how stumps are blown out, pulled and piled for burning, and the land made ready for the plow. Then the tractor and disc harrows were put on a newly-plowed portion, and each student had an opportunity of guiding the implement around the field. Part of this land was later used for the school garden.

Throughout the Course, whenever it was possible, the students were taken to see the operation of the farm machinery and often given a chance to take a part in using it.

In Animal Husbandry, the emphasis was laid upon the study of Clydesdale horses, Milking Shorthorn cattle, Shropshire sheep, and Yorkshire swine. The farm had excellent pure-bred specimens of these various breeds.

The whole of the work was made as practical as possible. Each student made the Babcock test for butter fat, trimmed tomato plants, planted and cared for a garden, collected insects, weeds, and weed seeds for study, recorded weather observations, performed experiments with soils and did other work in laboratory and field.

In connection with the study of poultry four incubators of different kinds were used, and each student took a part in caring for them, and for the eggs during incubation. More than 200 chicks were hatched, of Barred Rock and White Leghorn breeds.

School Garden and Experimental Plots

One of the most striking illustrations of the rapidity with which land can be put into use was afforded in connection with the School Garden. In order to secure soil that could be easily worked, no matter what the weather, it was necessary to clear a sandy part of the farm, some little distance from the school.

This land was in the rough on June 1st, but, by the time the class arrived in July, it had been cleared, plowed, and rolled, and, on the third day of the Course, the class took part in discing it with the tractor. Early the second week the students completed the preparation of the garden plots and planted the usual garden seeds, and, later, planted potatoes and transplanted cabbage, tomatoes, and cauliflower, which were ready in hotbeds. Several days before the close of the session, the students had radishes and onions for their table, from their own plots, and much material was ready for the use of the Domestic Science students in August. At no time during the course were the gardens watered.

The experimental plots of the farm were easily accessible for observation by the students, and many useful and interesting facts learned from them. In particular, they observed experiments on the choice of varieties of grains and legumes, with regard to earliness of ripening, silage crops, especially sunflowers, to take the place of corn, and on the possibilities of profitable flax-growing.

Pathescope

The Department of Agriculture kindly loaned a Pathescope, and the Ontario Motion Picture Bureau provided films, so that, whenever desired, it was possible to have an evening of enjoyment and instruction.

The films usually either illustrated agricultural operations or showed beauty spots in various parts of Ontario. Some of the titles of films used were:

The Dairy Cow, The Beef Breeds, The Draft Horse, O.A.C. 72 Oats, Babcock Test, Seed Testing, Butter Making in New Ontario, Stumping in New Ontario, Paper Making, Forest Protection, Beauty Spots in North Ontario, Temagami, Glens of Elora, Where Rail and Water Meet.

On two evenings, July 9th and August 4th, the students, aided by Mrs. Foulds, gave short musical and literary programmes.

Outside Trips

Two special excursions were taken on the Saturdays of the Course. On July 17th the school and some friends went to Englehart to visit the greenhouse and grounds maintained by the T. & N. O. Railway in connection with their work of beautifying stations.

Here the students learned practically what plants are most useful for out-of-door decoration, how to make a new lawn, a perennial border, and how to propagate the plants used.

Mr. Kerrigan, who has charge of this work, gave an excellent talk and demonstration of methods of care and cultivation. Through his kindness, the class was allowed the use of the lawn and grounds when serving lunch, and later, Mr. Kerrigan, who is an expert photographer, took an excellent picture of the company.

On July 31st a trip was taken to Iroquois Falls to visit the Abitibi Power Company's pulp and paper works. The Company furnished guides who showed the class in groups through the plant, demonstrating the whole process of the manufacture of paper from the time the logs enter the mill until they are turned into rolls of newsprint, ready to be shipped. After this, the Company's landscape gardener conducted the class through the town, showing the work of beautification in progress.

Sports and Games

Owing to the small size of the class and the fact that the campus was not in the best of condition, not so much could be done in this work as was planned. However, provision was made for playground ball, volley ball and many indoor games, and much enjoyment and profit was gained. Mr. Allan, the T. & N. O. Agent, kindly placed his tennis court at the disposal of the class, and many took advantage of his generosity. A tournament was begun, but, on account of unfavourable weather and stress of work at the end of the Course, it was not completed.

The Sunday Services

On three of the four Sundays of the session, chapel services were held in the school in the afternoon.

The speakers were Prof. John Sharp, of New Liskeard, formerly on the Staff of Queen's Theological College, Rev. Archdeacon Woodall, of Porquis Junction, who for years was engaged in missionary work in the James Bay region, and Mr. Raynor of the Seed Branch, Ottawa.

These men all brought inspiring messages. It was expected that Dr. J. B. MacDougall, Assistant Provincial Public School Inspector, would conduct the service on the fourth Sunday, but he found it impossible to be present.

Visitors

On several occasions visitors came to the school. Dr. MacDougall and Dr. Waugh spent the afternoon of July 11th with us, renewing many acquaintances and looking over the school and grounds.

On July 14th and 15th, Dr. Dandeno, Inspector of Elementary Agricultural Classes, paid an official visit, inspected the work and addressed the students.

On Monday, July 19th. Miss McKee, representing the Columbia Grafonola, gave a demonstration of the use of the Grafonola in school work.

On Friday, July 23rd, Mr. Lockett, of the Normal School, North Bay, and Mr. Raynor, of the Seed Branch of the Department of Agriculture, Ottawa, arrived. Mr. Raynor spoke to the students on Saturday on the Weed Seed Act, its value and enforcement.

The Hon. B. Bowman, Minister of Lands and Forests, called at the school for a short time on the morning of Saturday, July 24th. As he was personally acquainted with several of the students, who were from his constituency of Manitoulin, his call was particularly appreciated.

On the last day of the Course, which was also Demonstration Day at the Farm, there were many visitors, chief among them being Premier Drury and the Hon. Mr. Doherty, Minister of Agriculture. These and others spoke to the assembled audience in the afternoon.

APPENDIX G

ANNUAL REPORT OF THE INSPECTOR OF PUBLIC LIBRARIES

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to submit the following report of your Public Libraries Branch for the year 1920, and the statistics, etc., of the Public Libraries of the Province for 1919; also a statement of the grants paid in 1920 to Public Libraries, and to Historical, Literary, and Scientific Societies.

Summary

The most progressive step in the last forty years of library history in Ontario was made when the Legislature by a unanimous vote passed the Public Libraries Act of 1920 as presented by the Minister of Education. For the first time every community from the smallest to the largest was placed in a position to furnish itself with reasonably adequate free public library service. The Act provides for library maintenance on a sound, logical basis. Ontario is now provided with the necessary legal requirements for the development of a public library system worthy of taking its place as an important part of its educational system. The Minister has received the encomiums of leading library authorities, and the library and the daily press. No adverse comment has been heard; all who have considered the new Act commend the new principles adopted and approve of the details. The new Act contains all the requirements of a good library law to meet the problem in Ontario under existing conditions. We have reason to expect notable advancement throughout the Province. Comment on library legislation and the Act follows the summary paragraphs.

2. A full series of public library institutes was held.

3. A successful training school for librarianship was held.

4. Ten public libraries were established and two association libraries became free public libraries.

5. General progress in the libraries as a whole has been encouraging and all that could be expected under existing conditions.

6. The increase in book circulation was 900,000.

7. Expenditure on books was $48,000 greater than for the previous year—an increase of 68 per cent. The libraries had been under-expending on books for several years, and the increase is a matter of congratulation. The Public Libraries Branch had been urging more generous purchases of books, and the importance of book expenditure in its relation to adequate library service and the securing of increased library patronage was emphasized repeatedly in the *Ontario Library Review.*

8. The circulation of travelling libraries held its own. There is a great field for the development of this work, but inadequate accommodation renders further progress impossible.

9. A pamphlet "Reference Work and Reference Works" was published by the Public Libraries Branch, and the *Ontario Library Review* appeared each quarter.

The Public Libraries Act of 1920

In the revised Public Libraries Act of 1920 we have a statute that provides for vastly improved conditions for the public library system of the Province. Opportunity is now offered for the establishment of free libraries in rural districts as well as in places that have had the right for many years. Provision for free public library income is placed on a sound service basis that sets a new principle in library legislation. The association public library is continued chiefly as a means of providing for library service in communities where only a minority is in favour of free library privileges.

The Minister of Education is given greater powers than formerly for encouraging libraries and for assisting in the development of a worthy library system.

Many minor provisions have been made in the new Act in order to overcome difficulties that were encountered in the working of the former Act.

History

Although the earliest library in what is now Ontario was organized at Niagara in the year 1800, and aid was given to six or more mechanics' institutes by special Acts from 1835 to 1851, it was in the latter year, 1851, that the first Act was passed for the establishment and maintenance of library associations and mechanics' institutes. The Act passed through various changes, and in the year 1882 the Free Libraries' Act was passed. While provision was made for the establishment and maintenance of free libraries, the law respecting mechanics' institutes remained in force. Mechanics' institutes for many years gradually gave place to free libraries, but the former always were in the majority in number, and their successors, the association libraries, are still. Cities, towns, and incorporated villages were the only communities that could establish free public libraries from 1882 to 1898; in the latter year the privilege was extended to police villages, in 1916 a township clause was added to the Act, and in 1920 provision was made for the establishment of free public libraries in school sections.

The consent of the electorate has been a requirement of free public library establishment. From 1895 to 1909 a form of free public library could be established by means of a council passing a by-law to take over a mechanics' institute as a free public library; no public libraries' tax could be levied for a library established in this way. A number of free public libraries of this type came into being by reason of this special part in the Act during the fourteen years that it was in force. They proved to be very unsatisfactory by reason of not having an assured income. The Revised and Consolidated Act of 1909 placed these libraries under Part I of the Act, which gave them all the rights and privileges of free public libraries; this was the only practical means of ensuring their lives.

Free public library boards, from the time of the passing of the first Act, have been composed of the mayor or reeve, three members to be appointed by the municipal council, three by the board of education or public school board, and two by the separate school board where there was one. The system has been in every way satisfactory to all concerned, and the same board is provided for in the Act of 1920.

The public library rate provided in the original Act was one-half mill on the taxable assessment of the community to be served. In 1892 an amendment was passed, which reduced the rate to one-quarter mill for cities with more than 100,000 population. In 1903 an amendment made the rate for cities of more than 100,000, one-quarter mill exclusive of debt charges. At a later date a council was given power to increase the one-half mill rate, but not beyond three-quarters of a

mill, but a two-thirds vote of all the members of the council was required to make the increase. The amendments of 1919 gave councils the power, on a majority vote, to increase the one-half mill rate up to one mill, and in cities of over 100,000 a council was empowered to levy a rate of more than one-quarter mill exclusive of debt charges, to a rate not to exceed one-half mill. When the original Act was passed, and for some years afterwards, there was no clear idea concerning full and adequate library service to a community. Public library service was a new thing. Public demand could only be guessed at, and the idea of reaching all possible patrons through aggressive methods had not yet become the aim of library promoters. Years of experience have taught library workers that every library should be so organized and maintained as to enable it to give all possible patrons full and adequate library service of the right kind. The possibilities of the public library as a public utility are much greater than the early promoters dreamed of.

A limited rate is a good principle if rightly fixed. Library boards have not increased, nor have they been able to increase their rate since 1882, whereas all other public boards have increased their rates tremendously. Library boards have been the most economical of all boards; even though their economy was enforced, they are entitled to credit for all they have done on decidedly slender incomes. The public library rate was found satisfactory in the few places where the assessments were comparatively high, but the great majority of libraries (approximately 95 per cent.) were nearly starved from the beginning, and were never in a position to serve their communities; low assessment bases were the cause. The new rate is based on a service standard.

The association library is the successor of the mechanics' institute. The name mechanics' institute was used until the Revised Act of 1895 was passed, when the term "public library" was adopted for both free libraries and association libraries. The history of this type of institution, in as far as legislation is concerned, is chiefly made up of the various methods that have been in use for the payment of cash grants. The association libraries as a class have not progressed. There have always been a few excellent libraries of this kind, but the great majority have been below a reasonable standard. The success of these institutions depends entirely on the interest of a few enthusiastic volunteer workers. They have no permanent source of income, being maintained through membership fees, government grants, municipal grants, and through sums of money raised by means of entertainments. There seems to be no form of legislation that can ensure a good standard for maintenance of this type of library. The legislature was exceptionally generous many years ago in its grants, and the result was that these libraries did much less for themselves, and their funds were not wisely expended. As a library of this kind belongs to an association, a tax cannot be claimed, and at its best it must depend upon the enthusiasm of one or more leaders. The real office of the association library is to give library service where the majority are not in favour of a free public library.

The Public Libraries Acts, from the beginning up to the present, have given the government wide powers for encouraging library progress. No legislature in the world has been more generous with its public libraries. Cash grants have been given from the beginning. At one time as much as $400 was given to a single library. That amount was found to do more harm than good. For the last several years the maximum grant has been $260. Fifty per cent. has been allowed (conditionally) on book purchases up to a maximum grant of $200. A fifty per cent. grant has been given on periodicals to a maximum of $50. A further grant has

been given for a reading room to a maximum of $10. Further grants have been provided; $5 for a library that has an income of less than $25; $10 for an income of more than $25 and less than $100; $15 when it exceeds $100 and is less than $200; and $20 when the income is over $200 and less than $500. Grants have always been a source of strength to the smaller libraries. The Government has possibly erred on the generous side by giving its grant without taking into consideration the merits of book selection. Our libraries, as a whole, would be in a much better condition to-day if grants on books had been given on approved selections only. For a long time grants have been made through provisions specified in the Act, which has made it difficult to deal with several problems. The Act of 1920 provides that grants shall be made through regulations.

Our Act has provided the Minister in charge with other privileges for assisting libraries. The first provided for library visits, later the maintenance of travelling libraries was included. For the last twelve years provision has been made for the conducting of library institutes and for sending an instructor to libraries, and since 1911, for the maintaining of a library school. The new Act has added much wider powers.

In thirty-eight years of experience in dealing with free public libraries, and sixty-nine years with association libraries much has been learned, and the new Act is based on a careful study of the history and present conditions of the libraries of Ontario, of other provinces and other countries.

The New Act

The new Act is in three parts. Part I applies to free public libraries; part II to association libraries; part III contains general provisions dealing chiefly with the powers and privileges granted to the Minister of Education for dealing with public libraries; provisions for regulations are also made in part III.

Free Public Libraries

A free public library, according to the statute, is essentially the property of the electors of the municipality or other community in which the library is situated. It is legally qualified to support by tax-levy, and is under the management of a board appointed to serve on behalf of the electors.

The Act provides for the establishment of a free public library in a city, town, village, township, or school section. For all but the latter community the Act provides that a by-law for the establishment of a public library shall be approved by the electors. In a school section, a petition signed by a majority of the school supporters is required.

We have not yet arrived at the time when the public library is generally acknowledged to be a public necessity. There are many who think it is. All, however, will agree that it is a great public benefit. It needs the good-will of the people, and, on merit, should win its way sufficiently into public favour to receive the votes of the majority of ratepayers. The day will probably come when the public library will, by general consent, become one of the necessary institutions for the people.

This part provides also for the union of one or more libraries for public library purposes, and for one board to make a contract with another board for library service.

Free public library boards in cities, towns and villages are to be composed of the mayor, or reeve, as the case may be, and three members to be appointed by the council, three by the public school board, or board of education, and two by the separate school board, if any.

In police villages, a board shall be composed of the chairman of the board of police trustees, and two persons appointed by the police trustees, two persons appointed by the board of the school section, or each of the school sections comprised in, or forming part of the police village, and two persons appointed by the separate school board, if any, having jurisdiction in the police village. Township boards shall be composed of the reeve, and four members appointed by the township council, one of whom shall be a separate school supporter if there is a separate school in the township. Boards in school sections shall be composed of five persons, all of whom shall be appointed by the public school trustees where there is no separate school, and where there is a separate school three members shall be appointed by the public school trustees, and two by the separate school trustees.

Union library boards are also provided for. Length of terms for members in the various kinds of communities and times for appointment are provided.

Vacancies and disqualification, organization, meetings and records of the board are dealt with. Other provisions deal with limitation in capital expenditure from current revenue; purchase and ownership of property; branches, distributing stations, special features; that books and other necessaries shall be purchased; appointment of officers; power for making rules; recovery of value of lost and damaged articles; the right to close a library for a limited period; conditions under which a building may be used for special purposes; the submitting of estimates; borrowing on debentures; gifts and special grants by councils; libraries to be free; free access to books to be given, except when the Minister approves of all or part of a collection being kept otherwise; age limit not permitted; agreement for service to non-residents; and for public libraries heretofore established to come under the provisions of the new Act.

The Public Library Rate

"The municipal council of a city, town, village or township, the council of the township or the councils of the townships in which a police village or school section is situate, or the trustees of a school section if the section is not situate in an organized township, in addition to all other rates and assessments levied and assessed, shall levy and assess in each year a special rate to be called "The Public Library Rate" sufficient to provide the amount estimated by the board as hereinbefore provided, but such rate shall not exceed a rate on the dollar of taxable assessment that will yield more than fifty cents per capita of population of the municipality, police village or school section, as shown in the latest revised assessment roll, but by a vote of the majority of the council or board present and voting thereon, such rate may be increased to an amount to yield not more than seventy-five cents per capita of the population.

"Notwithstanding anything in this section the council of any municipality that prior to the first day of January, 1917, in any way whatsoever entered into any contract with any person, persons or corporation to expend annually not less than a stated sum for public library maintenance, by reason of receiving a gift, may levy and assess each year a public library rate sufficient to provide a sum to carry out the terms of the contract entered into."

The library rate was originally fixed at a fraction of a mill on the dollar of taxable assessment. The variations in per capita assessment throughout the Province are very great, and as libraries serve people and not property, the cost of service, if based logically and on the best principle, should be according to population. The per capita library income that obtained recently under the old Act varied from twelve cents to sixty cents per capita. The rate-clause in the new Act is the adoption of a new principle. It should meet the library problem, and is in every sense fair to the libraries and their supporters. The new Act gives all communities, regardless of size, equal opportunities. Very small communities might require a higher rate than would be required in larger places. At present, however, the smaller communities are such a long way from enjoying privileges like those granted in the new Act that it is likely to be several years before they would be ready to make use of a higher rate. All libraries will not use the rate-clause to its full extent for some time at least, but the privilege is given to all for securing good library service.

After a careful study of the whole situation, the Department of Education was convinced that fifty cents per capita furnished a reasonably good income for a public library for ordinary expenditure to an extent that adequate service of the right kind could be given to the public. There will probably be some instances where library patronage will reach an extraordinarily high standard. In such cases a higher rate than fifty cents might be required. Very large patronage should serve as an indication that public opinion is strongly behind a library, and no council would be likely to refuse an increased rate when public opinion is strongly in favour of the library.

Public Library Associations

Part II of the Act deals exclusively with public library associations. This type of library is the successor to the old mechanics' institute.

The law governing the establishment of new libraries of this type requires that ten or more persons, being British subjects and not less than 21 years of age, shall sign a declaration on forms obtained from the Minister; one copy to be filed with an affidavit of due execution with the Registrar of Deeds, and one copy bearing certificate of registration to be transmitted to the Minister.

The new Act specifically states that the membership of associations shall be composed of individuals and not families or other groups of persons. A register must be kept showing the date of expiration of each membership and records of fees paid, and in the register it shall be indicated as to which persons are 21 years of age or over. Library associations should make particular note of this new provision. A library association is a body corporate, and is qualified to own property and the necessary requirements for a library. It is quite obvious that members of such a corporation can not be families. Unfortunately there has been too much looseness on the part of our associations and in many cases it has led to difficulties. All members of a library association board must be British subjects, and the full age of 21 years. All persons over 15 years of age shall be granted membership on the payment of a uniform fee.

The composition of the board has not been changed. The third Monday in January is specified as the time for holding the annual meeting. Special provision has been made for filling vacancies on the board. Better clauses are inserted for the purpose of governing dissolution. The changes in this part of the Act are of a minor character, but they will tend to overcome many of the difficulties that have been met in the working of the old Act.

General Provisions

Part III of the Act contains general provisions. The powers for making regulations are stated (a) for the appointment and distribution of grants, (b) for the establishment, organization, etc., and rules of public libraries, (c) for the establishment, organization, etc., of library schools and examinations of students and for the issuance of certificates, (d) governing the qualifications of librarians and assistants and library clerks, (e) for conducting examinations and practical tests, (f) for granting certificates, (g and h) for the acceptance of courses and examinations and cancellation of certificates, (i) for the appointment of an examination board, (j) for the travelling libraries, (k) for the management of library institutes.

It should be pointed out here that Regulations are passed by the Lieutenant-Governor in Council under authority of an Act or Acts of the Legislature, and are intended to deal with matters of detail that can be treated more satisfactorily in regulations than in statutes. The new Act provides for the passing of regulations at such times as the Government may consider it expedient to place them in force.

Grants

The former Acts specified the bases upon which grants were to be paid. The new Act calls for grants to be paid by Regulation. This will be a better method for the reason that regulations can enter into greater detail and can be changed to meet conditions as they may arise. It is probable that grants paid in the year 1921, which libraries are qualifying for this year, will be practically on the same basis as was used to govern grants during the last few years.

Service to Libraries

This part of the Act provides for special methods by which the Minister of Education may assist the library movement. Greater scope is permitted for the promoting of travelling libraries. The Minister is given power to maintain a bureau of home study which may compile reading lists, bibliographies and instruction for study and practice. Powers for developing a school or schools for the training of librarians have been widened somewhat.

Provision for the establishment of county systems would have expressed the ideal for service for villages and rural districts, but such legislation would be merely ornamental for a few years at least. The new Act is for practical purposes.

Resolutions and Personal Comments on the Act

Resolution passed by the Ottawa Public Library Board:

"That the Board of the Ottawa Public Library wishes to express its profound gratification at the more liberal provision for the support of Public Libraries, provided for by the Revised Public Libraries Act.

"Moreover, it wishes to express strong approval of the library income being based upon the per capita instead of an assessment basis.

"In general the Board wishes to express its opinion that this Act is a piece of sound and progressive legislation."

Resolution of the Public Library Board of Toronto:

Moved by Mr. N. B. Gash, K.C., seconded by Mr. John Turnbull, and resolved:

"That the Toronto Public Library Board desires hereby to record its hearty approval of the Public Libraries Act as revised and passed at the last session of the Legislative Assembly, and the changes and improvements incorporated therein, and especially the provision for a per capita basis of library rates and the removal of impracticable restrictions on the operations of large libraries.

"And this Board affirms its opinion that the new and revised Act is a distinct improvement in Public Library legislation and will result in the extension of Public Library facilities throughout the Province and enable Library Boards to carry on their work more efficiently and with greater satisfaction to the public whom they serve.

"The Board further desires respectfully to commend the energy, thoroughness and ability displayed by the Minister and the Inspector of Public Libraries in the framing and passage of this Act.

"Passed at the Toronto Public Library Board meeting, October 8th, 1920."

T. W. Banton,
Chairman.

E. S. Caswell,
Secretary.

At a meeting of the London Public Library Board, held on June 3rd, the following resolution was unanimously carried:

"That the members of the London Public Library Board place on record their appreciation of the interest shown by the Minister of Education in the public library work of the Province, as evidenced in the very progressive legislation enacted at the recent session of the Ontario Legislature.

"The more generous provision made for the support of the public libraries will permit an expansion of the work and enable the libraries to serve a larger public and serve them better. We believe the new legislation will give decided stimulus to public library work in Ontario, not alone in the cities and towns, where it has already been well established, but in the rural districts as well where the need of such provision has been much emphasized of late years.

"It was directed that a copy of this resolution should be sent to the Minister of Education and to the Inspector of Public Libraries for the Province."

Fred. Landon,
Librarian and Secretary.

Resolution passed at Ottawa by the Eastern Library Institute, and transmitted to the Minister:

"It affords me much pleasure to transmit to you the following motion passed at the meeting of the Eastern Ontario Library Institute recently held in Ottawa:

"That this Eastern Ontario Library Institute wishes to express its approval of the progressive legislation of the new Public Libraries Act of 1920, and in particular of its adoption of the 'per capita' idea as related to library income, and wishes to couple with this motion the names of the Hon. R. H. Grant and of the Provincial Inspector of Public Libraries, Mr. W. O. Carson."

W. J. Sykes,
Librarian.

From the American Library Association:

"The American Library Association in conference at Colorado Springs, on Thursday morning, June 3rd, instructed the Secretary to convey to the Department of Education congratulations upon the passage of the new library law by the Ontario Legislature. The new rate clause will give the impetus to library work which will make Ontario very proud."

S. C. Bogle,
Assistant Secretary.

From Mr. Braid, Secretary and Trustee of the Windsor Public Library to the Inspector of Public Libraries:

"I have gone over the new Public Libraries Act at leisure, and have to congratulate you on the many important improvements in the same. . . . Some days ago I wrote to the Minister of Education thanking him as an old library trustee for putting the bill through the Legislature. . . . The new basis of library rate is a great advance on the old basis . . . a per capita is far better than a rate based on the assessment . . ."

From Mr. James Bertram, Secretary, Carnegie Corporation, New York:

"Your point appears well taken that as libraries serve people and not property, the tax for support should be on a per capita basis . . ."

Press Comment on the Act

"The Library in the Foreground. One of the most important pieces of legislation of the session of the Ontario Legislature for 1920 is the new Public Libraries Act. The Act is a comprehensive statute of eighty-seven sections, which not only consolidates and amends the former Public Libraries Act, but introduces new features which are noteworthy, and in some cases radical. The most far-reaching clause is number 39, which changes the public library rate from a half-mill on the assessment to a per capita rate of fifty cents. This applies to every municipality in the Province (with a free library), and means the difference between genteel poverty and a decent income. . . . Altogether it may be said that the Public Libraries Act is the most completely thought-out and most advanced library statute in the world. The only library law that can be compared with it is the Library Act of 1919 of the new Czecho-Slovachian Republic. The Minister of Education and his Superintendent of Public Libraries are entitled to high commendation for this advanced legislation."—Dr. E. A. Hardy, in *The Globe*, June 5th, 1920.

"The Ontario Legislature at the final sitting to-day passed a bill providing for the maintenance of public libraries, which is declared by Dr. E. A. Hardy, Secretary of the O.L.A., to be 'in many respects the most advanced library law in the world.' The present law calls for ½ mill for cities under 100,000 population, and ¼ mill for greater populations.

"The bill provides that the public library of a community shall be supported at the rate of 50 cents per head of population. In other words, in a city of 100,000 people, the City Council will levy $50,000 to support adequately the institution known as the public library. In its financial provision, Dr. Hardy says the Act is 'miles ahead of anything else on the continent.'"—*Ottawa Evening Journal*, May 29th, 1920.

"Only in backward and unprogressive communities will objection be taken to the bill passed at the closing session of the Legislature. . . . Free libraries have been rightly called poor men's universities, and they well deserve the name. Many lads have found them of infinite service. . . . . The increased support for public libraries that may be secured by the new Act should stimulate those entrusted with their administration toward the adoption of intelligent and helpful plans that will promote a higher ideal of citizenship."—From an editorial in the *Ontario Reformer*, Oshawa, June 10th, 1920.

"A bill which Dr. Locke, Chief Librarian in Toronto, says represents the greatest forward step in public library development on this continent, passed the Legislature yesterday.

"Dr. Locke was particularly well pleased with the bill, and was generous in his praise of Hon. R. H. Grant, Minister of Education, for fathering such a measure through the Legislature. 'The Minister of Education and the Inspector of Public Libraries have recognized that the public libraries are an essential part of the public education.'

"To one who knows anything about municipal matters, it must be obvious that the assessment rate is one of the most uneven things on which to base the grant. Nothing would look more like a saw-backed fever chart than to show the rise and fall and relative unevenness of the way which assessments are levied in the towns of our Province. Here the public libraries were supported by a grant of from anywhere from one-quarter to three-quarters of a mill. Now it has been recognized for the first time in the history of libraries in any official Governmental way that libraries serve people, and that, therefore, the basis of the support should be the population."—*The Globe*, May 29th, 1920.

"Education received a fair share of the new legislation, and under this head the new Public Libraries Act occupies a foremost place. For it the Minister of Education, Hon. R. H. Grant, is responsible. The new Act is one of the most workable and logical pieces of legislation in the matter of libraries in any Province, probably in any of the States of the Union."—Extract from an editorial in the *Collingwood Bulletin*.

"The Province of Ontario has long been noted for its progressive policy in regard to the assistance of the Provincial Government towards the development of public libraries. But the Government has far outdone itself this year in the new bill which has just passed the Legislature. Up to this time the financial support of public libraries has been provided by a municipal levy of one-fourth to one-half a mill on the assessed valuation of the property, real and personal, of any municipality. This was found to be not only inadequate but unequal, for the system of assessment differed so widely that some libraries were starved. When, for instance, a municipality had low assessment, but high tax rate, there was small chance for the public library. Now this

has been changed by having the support based upon the amount of service necessary. In other words, the public library is supposed to serve people, and therefore the fair basis of support is a per capita estimate. . . .

"Altogether it is a wonderful step forward, and library work is placed in a position of dignity that already has enabled librarians to demand—and receive—from the municipalities, remuneration for library work which will be more consistent with that dignity.

"This legislation was put through during an exceedingly busy session by a new Government—what is known as the Farmer-Labour Government—and is an indication of the attitude of these parties towards public education. Hon. Mr. Grant, the Minister of Education, who sponsered the bill, is a farmer who believes that an opportunity for self-education should be extended to the rural districts. He recognizes that a public library is a public educational institution and should be supported with the same interest and to the same extent as the public schools of the community. And with the increased amount available for maintenance by reason of this Act, it will be possible to place the librarian on an equality, so far as salary is concerned, with the teacher, as she will be a graduate of a training school whose standard of admission is similar to that of the Normal School where the teacher receives her training."—*Toronto Public Library Bulletin.*

"In all respects the new Act will be more practical in its workings, and it is stated that there is no better Libraries Act anywhere. . . . The Act is designed particularly to give an impetus to the free library movement in the rural districts and in the small places where libraries are so much needed."—*London Free Press.*

"The Legislature passed the new Public Libraries Act which is designed to give a big stimulus to the library movement in the rural districts and smaller places in Ontario and also to provide a more just and adequate support for the libraries of the Province generally. . . . Hon. R. H. Grant has been warmly supporting the measure, which is commended by the leading educational authorities of the Province as likely to bring good results, in the rural field particularly.—*London Advertiser.*

"According to the provisions of the Public Libraries Act, which received its third reading in the Legislature yesterday, the small communities and rural districts which have been at a disadvantage in the past, have now been provided for. A school section may now establish a free public library, and a more adequate rate has made possible the converting of many association libraries in small places into free libraries. A feature of the Act is placing the library rate on practically a per capita basis. Formerly the rate was levied on the regular assessment. Dr. Locke, chief librarian, stated yesterday that the new Act is the best on the continent."—*Mail and Empire*, May 29th, 1920.

"Important step in library work. Drury Government recognizes it is essential part of education. One of the most important steps in public library development was taken by the Legislature yesterday, when it passed a bill which provides that the public library of a community shall be supported at the rate of fifty cents per head of the population. In other words, in a city of 100,000 people, the city council will levy $50,000, as a rate necessary to support adequately the institution known as the public library. No matter what bill the present Government passes it is not likely that any will provoke as favourable comment as this action in regard to public libraries. It will be very interesting to watch the press of the United States and the men in that country who are interested in the attitude of a Farmer-Labour Government towards education." —*Toronto World.*

Six Library Institutes Held

The institutes were held in October and November. The interest in the subjects discussed and in the special addresses was all that could be desired. We have good reason to expect that the meetings will produce good results as well as enliven interest and stimulate enthusiasm. The attendance on the whole was good but hardly equal to expectations.

The places and dates of the meetings were Brantford, October 21st: North Bay, October 27th; London, November 11th; Ottawa, November 26th; Fort William, November 26th.

The series was under the direction of the Inspector of Public Libraries, who took personal charge of the afternoon meetings with the exception of the one at Fort William where Miss M. J. L. Black, Librarian of the Fort William Public Library, acted on behalf of the Department.

The main theme of the afternoon round-table was "Adequate Maintenance for Public Libraries," the object being to show the relationship of the budget to adequate library service of the right kind. Special afternoon and evening addresses were given at all the meetings.

Institutes are not without their value, but I do not recommend that full series be held annually while the present high cost of travelling and hotel accommodation continues. $2,200 has been the regular yearly estimate for institutes and represents their outside value, and this phase of our work should be limited and kept within the usual total cost.

Training School for Librarianship

The school was conducted along similar lines to that of the course of 1919, except that it was a single short course of three months, whereas the previous school was arranged to give in the first month a "small libraries" course complete in itself. The Inspector of Public Liraries served as director of the school, and Miss Dorothy A. Thompson, of the Public Libraries Branch, presided over the class. Forty-one students attended, thirty-seven of whom belonged to Ontario, one to each of the provinces—New Brunswick, Nova Scotia and Prince Edward Island, and one from the West China Union University, Chengtu, West China. Five of the students were especially interested in college and university library work and the remainder in public library service. The same competent instructors who have acted since 1916 composed the regular staff of instructors. The addresses of several special lecturers added materially to the interest of the students and contributed toward giving them a larger vision of the library world. We are again indebted to the Toronto Public Library Board, Mr. George H. Locke, Chief Librarian, and members of the staff for co-operation in library school work.

Special Associations

Grants have been paid to the Frontier College, the Canadian National Library for the Blind, and the Ontario Library Association. The three institutions are doing good work.

Statistics

I present on pages 274-281 a statement of the statistics of the Public Libraries of the Province, and a statement of the grants paid to Historical, Literary, and Scientific Institutions.

I have the honour to be, Sir,

Your obedient servant,

W. O. Carson,
Inspector of Public Libraries.

Toronto, January 26th, 1921.

APPENDIX H

REPORT OF THE INSPECTOR OF AUXILIARY CLASSES

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to submit for your consideration the following report on Auxiliary Classes.

I have the honour to be, Sir,

Your obedient servant,

S. B. Sinclair.

Toronto, January 4th, 1921.

The purpose of Auxiliary Classes is to help abnormal pupils by placing them in a separate classroom under a specially trained teacher, and with a course of study and school equipment adapted to their special needs.

The Ontario Auxiliary Classes Act provides for Advancement, Promotion, English, Disciplinary, Open Air, Hospital. Sanatorium, Ambulance, Speech, Myopia, Lip-Reading, Institution, Special, and Training Classes.

In July, 1920, there were seventeen such classes in Ontario (of which thirteen were in Toronto) that were eligible for the Government grant. There were some fifty other classes, which in a sense might be considered Auxiliary Classes.

Thirty years of research and experimentation have demonstrated that the Auxiliary Class is an essential factor in any well organized school system, and, everywhere, arrangements are being made to provide for such classes. The most obvious and pressing need is for the care of mentally subnormal children. There are over 250 such classes in New York City alone.

Subnormal children are those whose intelligence is below that of ordinary children of the same age. For example, a child of twelve years of age may have only the intelligence of an ordinary child of six years. Under such circumstances his intelligence quotient is said to be 6-12 or 50 per cent. Similarly if at twelve years of age he has advanced mentally only as far as an ordinary child of eight years, his mental age is said to be eight years and his intelligence quotient (or I.Q.) is said to be 8-12 or 66⅔ per cent. Speaking generally, children who will always be in a state of early infancy, that is less than three years mentally, are classed as idiots. Those with mental age between three and seven who will never advance beyond later infancy, are classed as imbeciles. Those with mental age between seven and eleven who will never advance beyond childhood, are classed as morons. Those with intelligence above morons but below normal are classed as borderline, dull or backward but not as feeble-minded.

An accurate selection of subnormal pupils for Auxiliary Classes has been rendered possible by the construction of the Binet scale of age standards for measuring intelligence by a series of tests for each year.

The tests as arranged in 1911 have been materially modified by years of experimentation and investigation with thousands of children.

When the examination is conducted with the reconstructed standardized scale by a wise and well-trained expert, and the findings are reinforced by knowledge possessed by teachers, parents, physician and nurse, the results can be relied upon as giving the mental age to within a few months. These results should always be treated as confidential, and there should be subsequent examinations from time to time.

An examination of 1,500 unselected children usually shows at least twenty children who are definitely feeble-minded. Four of the twenty are usually uneducable and of such low grade as to require custodial or semi-custodial care at home or in an institution. The remaining sixteen should be placed in charge of an Auxiliary class teacher—sixteen being the legal maximum for a subnormal Auxiliary Class. Much time and care have been devoted to the working out of the best courses of study and kinds of equipment for such classes, and highly satisfactory results have been achieved, especially with those of the higher grade.

The most dynamic argument in favour of the establishment of the Auxiliary Class, however, is found, not so much in what it teaches the subnormal child to do, as in what it prevents him from doing.

A child of twelve years physical age and eight years mental age placed in a class of normal children of nine years is unhappy and makes no progress. He occupies the teacher's time to no purpose, retards the advance of every other child in the class and produces constant unrest and irritation. The teacher is usually blamed by the parents for the child's lack of progress, where normal progress from the nature of the case is impossible, and is herself discouraged by the failure of her conscientious efforts to prepare the pupil for examinations.

It is a conservative estimate to say that the removal of such a pupil will increase the efficiency of the work of the entire class by 5 per cent. and, therefore, as a purely business proposition the Auxiliary Class makes for economy.

Further, the menace to morality where subnormal pupils are placed in the same classes with ordinary children, as every school Principal knows, can scarcely be overestimated; and when the danger is fully appreciated by the public there will be an insistent demand for a change.

On the other hand, the subnormal child when removed to an Auxiliary Class finds himself in a new environment, with work adapted to his special needs in nature and difficulty, with a teacher who understands his case, with opportunities for social adjustment and under social conditions which conduce to his well-being. In the new situation he is happy and learns to do unskilled manual work which will prepare him in the best way for future self-support. His parents, even if at first opposed to the change, soon find that the new condition is a great improvement on the old. In a well organized system of Auxiliary Classes there is an Employment Bureau so that when the time comes for him to leave school an arrangement is made by which he is provided with suitable work, if necessary, under supervision.

The time has arrived when there should be at least one Auxiliary Class in every city in the province. The Minister of Education has made an arrangement by which a survey to select a sufficient number of pupils to form one or two classes may be conducted by expert examiners without cost to the locality, but he has decided that such surveys will be conducted only in response to a request

from the local School Board, sent to his Department. During the last few weeks requests for surveys have been sent in by five City School Boards.

In Auxiliary Class work, as in all education, in the last analysis everything depends upon the teacher and, for Auxiliary Class work, special training is required. The Department held a Summer School in 1915 for the training of Auxiliary Class teachers, and another in 1919. New classes are being formed and the demand for trained teachers is greater than the supply. Arrangements are being made for a Summer School for 1921. There is urgent need for teachers, specially adapted for such work, who will be willing to take the special training and teach an Auxiliary Class.

APPENDIX I

REPORT OF THE PROVINCIAL SCHOOL ATTENDANCE OFFICER

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to submit herewith my first report on School Attendance.

Meetings Attended

During the year more than sixty meetings of county, township, and urban councils, of Boards of Education and urban school boards and of county trustees' associations were attended, where explanations of the School Attendance Act and of the Adolescent School Attendance Act were made and where consultations were held with councillors and trustees as to the best means of securing a wise enforcement of these Acts. Besides these I was present at a number of meetings of Women's Institutes and of other societies, where the new measures were discussed.

Visit to the United States

It was also my privilege to visit some of the cities and country places in the neighbouring States and study the methods there used to enforce the attendance of both children and adolescents.

Securing Accommodations

Many of the sparsely settled communities of the province were visited and also communities adjacent to our larger towns and cities, where new problems affecting attendance have arisen owing to rapid changes in population, and with a view to improving local education facilities negotiations have been conducted for opening temporary school quarters, for conveying children of isolated families to school, for altering section boundaries, and for consolidating schools where such appeared advisable.

School Attendance Officers Appointed

Since the School Attendance Act came into force 1,306 School Attendance Officers have been appointed, 868 by Township Councils, 417 by urban School Boards, 2 by County Councils, and 45 by School Boards in unorganized territory. In twenty-six urban centres the Public and the Separate School Boards have decided to unite in the organization of attendance departments. In very few cases have local bodies been reluctant to make the necessary appointments.

Improved Attendance

While definite information from local school attendance officers has not yet been received, I have pleasure in saying that generally there is an improvement in school attendance, notwithstanding the disorganization due to the war, the demand for production, and the shortage of labour. No great amount of truancy is to be found, but there is much irregularity in attendance throughout the country which

ought to be prevented. The chief problem is to educate parents to realize how seriously the progress of their children is hindered and the efficiency of schools is impaired by avoidable absence. From a study of 639 pupils who failed to pass recent promotion examinations, held in various centres in many different parts of the province, I found that only 29 per cent. could be classed as regular pupils and 71 per cent. of those who failed were absent one month or more during the preceding year.

Causes of Non-attendance

The causes of absence from school may be classified as due to conditions relating to the school, the home, the child, and the machinery by which compulsory school attendance is enforced.

The School

With the introduction and development of medical and dental inspection in the schools, the formation of special classes under the Auxiliary Classes Act, the careful system of inspection and the improved methods of teaching and discipline in vogue, small cause for irregular attendance can be found in the schools. As was suggested in the Report of the Chief Inspector last year, there might, perhaps, be greater flexibility in the curriculum, so that subjects which appeal especially to boys and girls of twelve and thirteen years, the most critical age from the standpoint of attendance, might be stressed in certain localities. For example, additional work in manual training and domestic science might direct the restlessness of certain pupils in one school while provision for the teaching of farm accounting might be effective in another.

The Home

As to home conditions which militate against good attendance, I find the following:

Ignorance on the part of parents of the value of education to the child.

Poverty.

The mercenary attitude of parents.

The fact that parents are so immersed in business or social activities that there exists little of that old-fashioned home life which provides the needful guardianship of growing children.

In cases of ignorance the task of the attendance officer is to educate the parents. In cases of poverty it is evident that children already handicapped can least afford to forego the advantages of an education. Here the Mothers' Pension and the Workmen's Compensation Acts have already shown their value, but the attendance officer must often enlist the aid of some organized or private charity. To deal with mercenary parents the attendance officer has the law, while for the children of parents immersed in business or social activities it is sometimes necessary to rely on local welfare agencies to assist in providing the guardianship the thoughtless or indifferent parents fail to furnish.

The Child

Where the fault lies with the child, I find the following most in evidence:

The child is under the influence of a gang.

He is too big for his class.

He lacks mental capacity for the ordinary school tasks.

He suffers from some physical disability.

He has no interest in academic subjects as presented, but wants to do something which appears to him to bear directly on earning a living.

The efficient attendance officer, with the aid of parents and school authorities, must solve each problem as it arises.

Machinery of Enforcement

Where failure to secure a high standard of attendance is due to the inefficiency of the machinery provided for enforcement of compulsory measures, it will be found that too few officers are provided, that the officers are inefficient, incompetent or lacking in interest in their work, that Justices of the Peace and Magistrates are not giving them sufficient support, or that school boards are not providing the needful disciplinary classes. In this connection the question of the establishment of a school for truant and wilful boys might be considered.

The Character of the School Attendance Officer

It is apparent that the attendance officer must be carefully chosen. He is the connecting link between the home and the school, and often the only school official whom the parents see. He must be interested in the child, have faith in education and possess a knowledge of school organization and of all the forces and activities of the community which he may employ in accomplishing his object. He should have sane judgment so that he may issue wisely the Home Permits and Working Certificates which the law allows, and, in addition, ability to keep clear and accurate records.

The Adolescent School Attendance Act

When the Adolescent School Attendance Act comes into force, provision should be made for three things:

1. *The Maintenance of a Census.* I regret to report that in many places assessors have failed to make a complete child census as required by Section 33 of the Assessment Act. School boards in the larger centres of population should provide means of checking and maintaining the census so that they may readily discover children not enrolled in school registers, children illegally employed, and defective children who require special provision.

2. *Means of issuing expeditiously Home Permits and Working Certificates.* As it will be illegal after September 1st, 1921, for any one to employ an adolescent to whom a Working Certificate has not been issued, and as the attendance officer is the only individual who may issue the same, foresight is needed on the part of local authorities so that delay and inconvenience may be avoided.

3. *Means of Recording and Filing.* A system should be provided so that information may be available for the establishment of part-time courses of instruction, and for keeping a record of cases which require further attention.

The printing of a number of blanks by the Department has already made easier and more exact the work of attendance departments.

I have the honour to be, Sir,

Your obedient servant,

J. P. Cowles,
Provincial School Attendance Officer.

Toronto, December 23rd, 1920.

APPENDIX J

REPORT OF THE DIRECTOR OF PROFESSIONAL TRAINING

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

I have the honour to submit a report on the work of the Provincial Schools for the training of teachers for the year 1920.

Thirty classes have graduated this year from the various professional schools engaged in the training of High and Public School teachers. Four of these classes graduated from the Faculties of Education at Kingston and Toronto, two having taken the course for High School Assistants' certificates and two that for First Class Public School certificates. Eight classes graduated from the Provincial Normal Schools, seven having taken the course for Second Class Public School certificates and one that for Kindergarten-Primary certificates. Twelve classes graduated from Summer Schools, four classes having taken the course for Kindergarten-Primary certificates, four that for District certificates and four that for Limited Third Class certificates. Six other classes taking the course for Limited Third Class certificates graduated from the Autumn Model Schools. About one hundred and twenty-five days were spent during the year in inspecting the training classes and the forty affiliated practice schools.

The enrolment of students in the above classes according to sex was as follows:

	Male.	Female.
Faculties of Education	155	190
Provincial Normal Schools	203	1,045
Autumn Model Schools	4	58
Summer Model Schools	11	215
Kindergarten-Primary Summer Schools	...	224

A noteworthy feature of the classes of 1920 was the increase in the number of male students graduating from the Faculties of Education and the Normal Schools. This increase was caused by the fact that a number of our young men who had served Canada so valiantly during the Great War felt constrained on their return from overseas to continue their national service in the no less important office of teaching. Of the veterans training as teachers, 104 were enrolled at the Faculties of Education, and 119 at the Normal Schools, while 30 took a special course to qualify as teachers of Manual Training. The Department is to be congratulated on having secured for our schools the service of such a large number of returned men.

Certificates Granted

The following table shows the number and the grade of the certificates issued during the year to the graduating students and to extramural candidates qualified to take the final examinations without attendance.

High School Assistants	114
First Class	197
Second Class	1208
Limited Third Class	216
District	119
Kindergarten-Primary	88

Provisional standing was also granted a number of teachers from the British Isles and from the other Provinces of the Dominion.

The Supply of Teachers

It will be seen from the figures given above that about two thousand candidates were certificated during the year to teach in the High, Public and Separate Schools of the Province. As about twenty per cent. of the candidates were teachers seeking to improve their former status, the actual increase for the year in the number of certificated teachers was about sixteen hundred. The increase in the requirements of our Provincial Schools averages less than four hundred additional teachers each year. The present annual increase in the number of certificated teachers is, therefore, quite sufficient both to meet the increasing requirements of the schools and also to supplement losses through death and superannuation as well as those more welcome losses through the resignation of female teachers in order to enter upon the very important office of homemaking. Any shortage in the supply of teachers for our schools, therefore, must be accounted for, not through the losses mentioned above, but rather by the fact that many of our candidates, after qualifying as teachers, are attracted, through the prospect of higher remuneration, either to other occupations or to the schools of the Western Provinces.

While Ontario has never displayed a narrow spirit in giving of her best to meet the pressing needs of the newer provinces for trained teachers, yet it is not out of place at this time to ask our teachers, instead of yielding to the call of distant opportunities, to realize that their native province, with its many and varied educational institutions, presents to the ambitious teacher more opportunities for real advancement in the profession than are likely to be found elsewhere. Although the path of advancement may to the Ontario teacher at times seem slow, yet in the end he will find that this slower advancement is the more real and that the zealous teacher by continuing in the service of his native province has been able to satisfy fully his professional ambitions.

To the teacher who may be attracted by the larger financial opportunities associated with other occupations, it should be pointed out that, though this profession may not present the same opportunities as others to gain those rewards that perish, yet it does assure its members a life of reasonable comfort and offers as a compensation special opportunities for intellectual advancement and spiritual culture. To the one also filled with a missionary zeal for teaching, no material reward can compare with the satisfaction that comes from an unselfish devotion to that greatest of all patriotic services, the development of national character in our Canadian boys and girls.

Noteworthy Changes

The outstanding advancement of the year in connection with teacher-training in Ontario was the establishment of the new Ontario College of Education in Toronto in place of the Faculties of Education at Kingston and Toronto. At the same time, the training of candidates for First Class certificates was transferred from the Faculties of Education to the Provincial Normal Schools situated at Hamilton, London, Ottawa and Toronto. This change will not only extend to a larger number of candidates the opportunity of taking locally the course of training for First Class certificates, but, by relieving the new College of Education of

this labour, will enable it, in addition to training candidates for High School certificates, to fulfil more adequately a second and no less important function, that of providing special courses for teachers and other educators desiring to improve their standing or carry on investigations in connection with the vital and pressing problems that confront present-day educators. Thus it is confidently expected that the new College will meet the need of an educational centre in which Canadian teachers may receive a special training in educational leadership, for which they have hitherto been accustomed to visit foreign Universities.

The year 1920 has also fully demonstrated the wisdom of the departure made in September, 1919, of having a female member of each Normal School staff appointed to take charge, under the direction of the Principal, of the social life of the female students. These teachers are exerting a marked influence for good upon the students under their charge, especially in the case of students living away from home. Several of the Principals report also that they found the assistance of these teachers exceedingly helpful in cases of sickness among the students, notably during the epidemic of influenza.

The musical equipment of the different training schools has been increased by the addition of a phonograph. It is intended that a thorough investigation shall be made of the possibilities of this instrument as an auxiliary in connection with the teaching of various school subjects.

The following appointments and transfers have taken place during the year in connection with the staffs of the Provincial Normal Schools:

A. J. Park, appointed Instructor in Writing at the Hamilton Normal School, in place of Oscar Mann, resigned.

Horace G. Lockett, M.A., transferred from the North Bay Normal School to the Hamilton Normal School in place of F. E. Perney, B.A., B.Pæd., resigned.

J. A. Bannister, B.A., appointed English Master at the North Bay Normal School in place of Horace G. Lockett, M.A.

J. D. Campbell, B.A., transferred from the Stratford to the Ottawa Normal School.

W. J. Forbes, B.A., transferred from the Ottawa to the Stratford Normal School.

A. W. McGuire, B.A., appointed Master at the Ottawa Normal School in place of W. Haliday, B.A., resigned.

Jno. C. Gordon, appointed an additional Master at the Toronto Normal School.

Teachers' Institutes

In accordance with your instructions, arrangements were made to have members of the training staffs visit the Teachers' Institutes of the Province during the Annual Meetings and take part in the programmes. Ninety such visits were made, each lecturer attending at least one Institute Meeting and giving two lectures thereat. Three of these Institutes were visited and addressed personally.

I have the honour to be, Sir,

Your obedient servant,

S. A. Morgan,
Director of Professional Training.

Toronto, January, 1921.

APPENDIX K

STATISTICS OF ELEMENTARY AND SECONDARY SCHOOLS

Summary

I. ELEMENTARY SCHOOLS

a. Public Schools

Number of Public Schools in 1919		6,179
Increase for the year	43	
Number of enrolled pupils of all ages in the Public Schools during the year (exclusive of Continuation and Night School pupils)		471,729
Increase for the year	14,114	
Average daily attendance of pupils		308,708
Increase for the year	47,544	
Percentage or average attendance to total attendance		65.44
Increase for the year	8.37	
Number of persons employed as teachers in the Public Schools: men, 1,233; women, 10,570; total		11,803
Increase for the year	384	
Number of teachers who attended Normal School		8,932
Increase for the year	70	
Number of teachers who attended Normal College or Faculty of Education		1,156
Increase for the year	55	
Number of teachers with a University degree		119
Decrease for the year	11	
Average annual salary for male teachers		1,348
Increase for the year	122	
Average annual salary for female teachers		817
Increase for the year	110	
Average experience of male teachers		14.3 years
Average experience of female teachers		7.9 years
Amount expended for teachers' salaries		$9,362,876
Amount expended for Public School houses (sites and buildings)		$2,508,459
Amount expended for all other purposes		$4,959,511
Total amount expended for Public Schools		$16,830,846
Increase for the year	$3,123,681	
Cost per pupil (enrolled attendance)		$35.67
Increase for the year	$5.72	

b. Roman Catholic Separate Schools

Number of Roman Catholic Separate Schools in 1919...		559
Number of enrolled pupils of all ages		74,833
Increase for the year	3,531	
Average daily attendance of pupils		49,289
Increase for the year	8,754	
Percentage of average attendance to total attendance ..		65.86
Increase for the year	9.01	
Number of teachers		1,586
Increase for the year	60	
Amount expended for teachers' salaries		$797,523
Amount expended for school houses (sites and buildings)		$361,890
Amount expended for all other purposes		$861,368
Total amount expended on R. C. Separate Schools		$2,020,781
Increase for the year	$551,223	
Cost per pupil (enrolled attendance)		$27.00
Increase for the year	$6.39	

c. Protestant Separate Schools

Number of Protestant Separate Schools (included with Public Schools, *a*) in 1919		6
Number of enrolled pupils		464
Increase for the year	27	
Average daily attendance of pupils		314
Increase for the year	50	

d. Night Elementary Schools

Number of Night Schools in 1919-20		11
Decrease for the year	2	
Number of pupils enrolled		843
Increase for the year	172	
Number of teachers engaged		23
Increase for the year	1	

II. SECONDARY SCHOOLS

a. High Schools and Collegiate Institutes

Number of High Schools (including 47 Collegiate Institutes) 1919-20		167
Increase for the year	3	
Number of pupils enrolled in High School		33,036
Increase for the year	2,304	
Average daily attendance of pupils		26,816
Increase for the year	2,316	
Percentage of average to total attendance		81.17
Increase for the year	1.45	
Number of teachers in High Schools		1,168
Increase for the year	80	

Average annual salary, Principals		$2,213
Increase for the year	$259	
Average annual salary, Assistants		$1,763
Increase for the year	$267	
Average annual salary, all Teachers		$1,828
Increase for the year	$263	
Highest salary paid		$4,400
Increase for the year	$700	
Amount expended for teachers' salaries, 1919		$1,801,602
Amount expended for school houses (sites and buildings)		$261,733
Amount expended for all other purposes		$684,707
Total amount expended on High Schools, 1919		$2,748,042
Increase for the year	$161,928	
Cost per pupil, enrolled attendance		$83.18
Decrease for the year	$0.97	

b. Continuation Schools

Number of Continuation Schools, 1919-20		137
Increase for the year	1	
Number of pupils in attendance		5,126
Increase for the year	120	
Average daily attendance of pupils		3,955
Increase for the year	182	
Percentage of average to total attendance		77.15
Increase for the year	1.79	
Number of teachers		244
Increase for the year	10	
Average annual salary, Principals		$1,303
Increase for the year	$132	
Average annual salary, Assistants		$929
Increase for the year	$103	
Highest salary paid		$2,100
Increase for the year	$300	
Amount expended on teachers' salaries, 1919		$253,654
Amount expended for school houses (sites and buildings)		$50,545
Amount expended for all other purposes		$84,502
Total amount expended on Continuation Schools, 1919		$388,701
Increase for the year	$55,848	
Cost per pupil, enrolled attendance		$75.82
Increase for the year	$9.33	

c. Night High Schools

Number of Night High Schools in 1919-20		24
Decrease for the year	1	
Number of pupils enrolled		5,042
Increase for the year	557	
Number of teachers engaged		166
Increase for the year	13	

d. Industrial, Technical, and Art Schools

Number of Day Industrial, Technical, and Art Schools, 1919-20		12
Increase for the year	1	
Number of pupils enrolled		4,790
Increase for the year	51	
Average daily attendance of pupils		2,769
Increase for the year	235	
Number of teachers engaged		177
Increase for the year	22	
Number of Evening Industrial, Technical and Art Schools, 1919-20		49
Increase for the year	13	
Number of pupils enrolled		26,527
Increase for the year	9,794	
Number of teachers engaged		845
Increase for the year	234	
Amount expended on teachers' salaries, day and evening schools, 1919		$324,193
Amount expended on school houses (sites and buildings)		$117,171
Amount expended for all other purposes		$217,709
Total amount expended on day and evening industrial, technical and art schools, 1919		$659,073
Increase for the year	$165,873	

III. GENERAL

Elementary and Secondary Schools

Pupils enrolled in elementary schools, 1919		546,562
Pupils enrolled in night elementary schools, 1919-20		843
Pupils enrolled in secondary schools, 1919-20		42,952
Pupils enrolled in night high schools, 1919-20		5,042
Pupils enrolled in evening industrial, technical and art schools, 1919-20		26,527
Total enrolment, all schools		621,926
Increase for the year	30,643	
Percentage of total population enrolled		22
Total expenditure		$22,647,443
Increase for the year	$4,058,553	

Fourteen thousand, nine hundred and twenty day pupils were admitted "for the first time" in 1919-20 to the Secondary Schools, as below:

High Schools and Collegiate Institutes	11,655
Continuation Schools	2,031
Industrial, Technical and Art Schools	1,234
Total	14,920

In 1919 there were enrolled in the Elementary Schools (exclusive of Fifth Classes) 541,234 pupils. These are made up of about 7 years' enrolments. Consequently on the average about 77,300 (541,234 divided by 7) pupils enter the

Elementary Schools per year, and 14,920 enter the state Secondary Schools, or about 19 per cent. of those who attend the Elementary Schools.

The above statement does not take into consideration those pupils who take up Lower High School work in the Fifth Classes of the Elementary Schools, nor the many who enter private schools and colleges after graduating from our elementary schools. If all these were taken into consideration the number who take up secondary education would form at least twenty-five per cent. of our population.

Average cost per pupil (enrolled attendance) in all Schools

	1902	1907	1912	1917	1918	1919
Teachers' salaries..	$7 63	$10 44	$14 26	$17 97	$18 85	$20 17
Sites and buildings	0 97	2 86	5 90	4 05	2 66	5 31
All other expenses..	2 80	4 40	5 34	7 72	9 92	10 95
For all purposes	11 40	17 70	25 50	29 74	31 43	36 43

Comparative School Statistics, 1867-1919

I. PUBLIC AND SEPARATE SCHOOLS

These elementary school tables 1, 2, 3, 4 and 5, for the purpose of comparison with previous years in which the Separate Schools were included with Public Schools, include Roman Catholic and Protestant Separate Schools. The tables A, B, C, D and E give the statistics of the Public Schools, including Protestant Separate Schools; the statistics of the R. C. Separate Schools are given in Tables F and G; those of the Protestant Separate Schools appear in Table Q; and the Night Schools in Table R.

1. School Population and Attendance

The school population (5 to 16 and 5 to 21 years) of the Province, as ascertained by the assessors, and the school attendance are given in the following table:

Year	Population 5 to 16 years	Population 5 to 21 years	Total number of enrolled pupils	Boys	Girls	Average daily attendance	Percentage of average attendance to total number attending school
1867	447,726	.....	401,643	213,019	188,624	163,974	40.82
1872	495,756	.....	454,662	238,848	215,814	188,701	41.50
1877	494,804	.....	490,860	261,070	229,790	217,184	44.25
1882	483,817	.....	471,512	246,966	224,546	214,176	45.42
1887	.....	611,212	493,212	259,083	234,129	245,152	49.71
1892	.....	595,238	485,670	253,091	232,579	253,830	52.26
1897	.....	590,955	482,777	251,677	231,100	273,544	56.66
1902	.....	584,512	454,088	232,880	221,208	261,480	57.58
1907	.....	590,285	448,218	229,794	218,424	266,503	59.45
1912	.....	609,127	467,022	239,187	227,835	291,210	62.35
1917	512,562	628,996	527,664	266,255	261,409	342,571	64.92
1918	508,678	640,049	528,917	266,367	262,550	*301,699	*57.04
1919	513,600	652,264	546,562	275,628	270,934	357,997	65.49

Note.—Kindergarten attendance is not included except for the years 1917, 1918 and 1919.
* This decrease in attendance was caused by the "Influenza" epidemic.

2. Classification of Pupils

Year	Kindergarten	Kindergarten-Primary	1st Reader, Part I, or Primer	1st Reader, Part II, or 1st Book	2nd Book	3rd Book	4th Book	5th Book, or beyond 4th Book
1867	.....	.....	.....	* 79,365	98,184	83,211	68,896	71,987
1872	.....	.....	.....	*160,828	100,245	96,481	67,440	29,668
1877	.....	.....	.....	*153,630	108,678	135,824	72,871	19,857
1882	.....	.....	.....	*165,834	106,229	117,352	71,740	10,357
1887	.....	.....	115,657	76,704	100,533	108,096	81,984	10,238
1892	.....	.....	114,932	73,015	96,074	99,345	88,934	13,370
1897	.....	.....	110,567	70,808	91,330	99,682	89,314	21,076
1902	.....	.....	107,441	69,062	85,732	90,630	83,738	17,485
1907	.....	.....	112,552	60,194	84,622	89,371	85,752	15,727
1912	.....	.....	126,100	67,368	92,728	88,811	85,213	† 6,802
1917	16,515	2,793	125,321	73,996	106,034	105,062	91,989	† 5,954
1918	15,709	5,018	123,677	72,377	104,935	109,364	92,156	† 5,681
1919	16,386	7,560	128,826	75,171	106,107	110,115	97,069	† 5,328

The following table classifies the pupils in the various forms, as to rural and urban schools:

Rural Schools

Year	Kindergarten	Kindergarten-Primary	First Reader Part I or Primer	First Reader Part II or First Book	Second Book	Third Book	Fourth Book	Fifth Book or beyond Fourth Book	Totals
1904	.....	.....	60,784	36,941	47,930	50,297	47,289	9,892	253,133
1907	.....	.....	60,470	31,538	46,219	48,247	46,815	8,958	242,247
1912	.....	.....	62,712	30,293	43,775	42,450	44,049	†3,984	227,263
1917	.....	75	58,290	30,657	44,407	43,834	41,321	†2,926	221,510
1918	101	843	57,353	29,282	42,868	43,957	39,973	†2,752	217,129
1919	.....	1,923	59,526	30,422	42,373	44,430	40,559	†2,403	221,636
Urban Schools (cities, towns and incorporated villages)									
1904	.....	.....	44,456	27,800	37,299	39,814	35,815	6,304	191,488
1907	.....	.....	52,082	28,656	38,403	41,124	38,937	6,769	205,971
1912	.....	.....	63,388	37,075	48,953	46,361	41,164	†2,818	239,759
1917	16,515	2,718	67,031	43,339	61,627	61,228	50,668	†3,028	306,154
1918	15,608	4,175	66,324	43,095	62,067	65,407	52,183	†2,929	311,788
1919	16,386	5,637	69,300	44,749	63,734	65,685	56,510	†2,925	324,926

* In 1st Reader. † Exclusive of Continuation School pupils.

The following table compares the attendance and gives the percentages from rural and from urban municipalities for several years:

Year	Attendance in Rural Schools	Attendance in Urban Schools
1903	260,617 or 57.88% of total	189,661 or 42.12% of total
1907	242,247 or 54.05% "	205,971 or 45.95% "
1912	227,263 or 48.66% "	239,759 or 51.33% "
1917	221,510 or 41.97% "	306,154 or 58.02% "
1918	217,129 or 41.05% "	311,788 or 58.94% "
1919	221,636 or 40.55% "	324,926 or 59.44% "

NOTE :—Kindergarten attendance for years previous to 1916 is not available for the above tables.

3. Teachers' Certificates

Year	Number of teachers	Male	Female	1st Class	2nd Class	3rd Class	Kindergarten-Primary	Kindergarten	Manual Training	Household Science	Other certificates, including old County Board, Dist. and Temp.	Number of teachers who attended Normal School	*Normal College or Faculty of Education
1867....	4,890	2,849	2,041	1,899	2,454	386	....	....	....	....	151	666	.....
1872....	5,476	2,626	2,850	1,337	1,477	2,084	....	....	....	....	578	828	.....
1877....	6,468	3,020	3,448	250	1,304	3,926	....	....	....	....	988	1,084	.....
1882....	6,857	3,062	3,795	246	2,169	3,471	....	....	....	....	971	1,873	.....
1887....	7,594	2,718	4,876	252	2,553	3,865	....	....	....	....	924	2,434	.....
1892....	8,680	2,770	5,910	261	3,047	4,299	....	200	....	....	873	3,038	.....
1897....	9,351	2,784	6,567	343	3,386	4,465	....	223	....	....	934	3,643	.....
1902....	9,614	2,294	7,320	608	4,296	3,432	....	247	....	....	1,031	4,774	.....
1907....	10,170	1,783	8,387	715	3,887	3,452	....	277	....	....	1,839	4,587	.....
†1912....	11,128	1,511	9,617	674	6,419	1,804	....	371	....	....	1,860	6,705	614
†1917....	12,762	1,317	11,445	1,106	8,784	1,317	66	310	33	38	1,108	9,203	1,053
†1918....	12,945	1,068	11,877	1,099	9,018	1,247	89	283	37	46	1,126	9,583	1,071
†1919....	13,389	1,328	12,061	1,246	9,193	1,159	130	283	48	73	1,257	9,697	1,223

The men engaged in teaching in these schools in 1919 formed 9.91 per cent. of the whole number. In 1918 they formed 8.25 per cent.

The number of teachers and the class of certificates, in the Public Schools alone, in each County and District of the Province will be found in Table C of this Appendix.

The following table classifies the teachers and certificates as to rural and urban schools:

	Teachers			Certificates		
	Total	Male	Female	1st Class	2nd Class	3rd Class
Rural Schools, 1904	5,974	1,469	4,505	152	1,944	3,107
Rural Schools, 1907	6,038	1,201	4,837	180	1,542	3,079
†Rural Schools, 1912	6,143	894	5,249	165	3,002	1,463
†Rural Schools, 1917	6,455	655	5,800	343	4,232	1,129
†Rural Schools, 1918	6,484	407	6,077	324	4,333	1,047
†Rural Schools, 1919	6,597	558	6,039	348	4,362	958
Urban (cities, towns and incorporated villages), 1904	3,580	606	2,974	483	2,248	289
Urban, 1907	4,132	582	3,550	535	2,345	373
†Urban, 1912	4,985	617	4,368	509	3,417	341
†Urban, 1917	6,307	662	5,645	763	4,552	188
†Urban, 1918	6,461	661	5,800	775	4,685	200
†Urban, 1919	6,792	770	6,022	898	4,831	201

In the rural schools in 1919 the men formed 8.45 per cent., and in the urban schools, 11.33 per cent. of the number of teachers employed in each case.

*For the years previous to 1912 the numbers who attended Normal College or the Faculty of Education are included in the preceding column.

†Exclusive of Continuation School teachers.

4. Teachers' Salaries and Experience

Teachers' Salaries

Year	Highest salary paid	Average salary, male teacher, province	Average salary, female teacher, province	Average salary, male teacher, cities	Average salary, female teacher, cities	Average salary, male teacher, towns	Average salary, female teacher, towns	Average salary, male teacher, incorporated villages	Average salary, female teacher, incorporated villages	*Average salary, male teacher, rural schools	*Average salary, female teacher, rural schools	Average salary, male teacher, all urban schools	Average salary, female teacher, all urban schools
	$	$	$	$	$	$	$	$	$	$	$	$	$
1867.	1,350	346	226	532	243	464	240	.....	.....	261	189	.....	.....
1872.	1,000	360	228	628	245	507	216	.....	.....	305	213	.....	.....
1877.	1,100	398	264	735	307	583	269	.....	.....	379	251	.....	.....
1882.	1,100	415	269	742	331	576	273	.....	.....	385	248	.....	.....
1887.	1,450	425	292	832	382	619	289	.....	.....	398	271	.....	.....
1892.	1,500	421	297	894	402	648	298	.....	.....	383	269	.....	.....
1897.	1,500	391	294	892	425	621	306	.....	.....	347	254	.....	.....
1902.	1,600	436	313	935	479	667	317	.....	.....	372	271	.....	.....
1907.	1,900	596	420	1,157	592	800	406	659	372	458	379	907	453
1912.	2,200	788	543	1,320	703	977	519	779	492	566	493	1,141	618
1917.	2,500	1,038	650	1,637	795	1,166	628	908	573	686	580	1,425	731
1918.	2,800	1,226	707	1,777	915	1,261	668	959	612	743	609	1,558	822
1919.	2,800	1,348	817	2,024	1,130	1,372	749	1,064	671	807	663	1,780	991

*Incorporated villages included from 1867 to 1902 inclusive.

Increases in salaries in the cities, towns, villages and rural schools are shown in the above table. In Table C the average salaries for 1919 of the Public School teachers of the various Counties and Districts are given separately, and summarized for the cities, towns and villages. This table also states the salaries paid to teachers according to the grade of certificate held, and illustrates to what extent the teacher with the higher certificate commands the higher salary. The average salaries for the Province are as follows:

	Male				Female			
	1912	1917	1918	1919	1912	1917	1918	1919
First Class certificates.....	$1,340	$1,548	$1,782	$1,960	$634	$728	$775	$898
Second Class certificates..	757	916	1,041	1,101	587	673	732	844
Third Class and District certificates	524	562	595	664	458	507	537	592

Teachers' Experience

The length of service or experience of the teachers engaged in the Public Schools is also shown in Table C, where the numbers who have taught from less than one year up to forty years and over are given for each year.

The average experience in the Public Schools at the end of 1919 was as follows:

Male teachers, 14.3 years.

Female teachers, 7.9 years.

All teachers, 8.5 years.

5. Receipts and Expenditures

Year	Receipts				Expenditures					
	Legislative grants	Municipal school grants and assessments	Clergy reserve funds, balances and other sources	Total receipts	Teachers' salaries	Sites and building school houses	Libraries, maps, apparatus, prizes, etc.	Rent, repairs, fuel and other expenses	Total expenditure	Cost per pupil
	$	$	$	$	$	$	$	$	$	$ c.
1867	187,153	1,151,583	331,599	1,670,335	1,093,517	149,195	31,354	199,123	1,473,189	3 67
1872	225,318	1,763,492	541,460	2,530,270	1,371,594	456,043	47,799	331,928	2,207,364	4 85
1877	251,962	2,422,432	730,687	3,405,081	2,038,099	477,393	47,539	510,458	3,073,489	6 26
1882	265,738	2,447,214	757,038	3,469,990	2,144,449	341,918	15,583	525,025	3,026,975	6 42
1887	268,722	3,084,352	978,283	4,331,357	2,458,540	544,520	27,509	711,535	3,742,104	7 59
1892	283,791	3,300,512	1,227,596	4,811,899	2,752,629	427,321	40,003	833,965	4,053,918	8 40
1897	366,538	3,361,562	1,260,055	4,988,155	2,886,061	391,689	60,585	877,335	4,215,670	8 73
1902	383,666	3,959,912	1,422,924	5,766,502	3,198,132	432,753	86,723	1,107,552	4,825,160	10 62
1907	655,239	6,146,825	2,455,864	9,257,928	4,389,524	1,220,820	213,096	1,732,739	7,556,179	16 85
1912	842,278	9,478,887	3,936,887	14,258,052	6,109,547	2,777,960	167,755	2,218,698	11,273,960	24 14
1917	907,846	12,193,439	4,168,000	17,269,285	8,398,450	1,987,644	290,207	3,435,534	14,111,835	26 74
1918	970,585	13,114,725	4,278,957	18,364,267	9,027,151	1,242,642	169,136	4,737,794	15,176,723	28 69
1919	1,316,529	14,364,049	6,912,656	22,593,234	10,160,399	2,870,349	302,046	5,518,833	18,851,627	34 49

The increase for the year in the amount paid as teachers' salaries was $1,133,248. The total expenditure increased by $3,674,904.

These tables show the expenditure per pupil for the years as given below:

Average cost per pupil (enrolled attendance)

	1902	1907	1912	1917	1918	1919
Teachers' salaries	$7.04	$9.79	$13.08	$15.91	$17.06	$18.59
Sites and buildings	0.95	2.72	5.95	3.77	2.35	5.25
All other expenses	2.63	4.34	5.11	7.06	9.28	10.65
For all purposes	10.62	16.85	24.14	26.74	28.69	34.49

Average cost per pupil (average attendance)

	1902	1907	1912	1917	1918	1919
Teachers' salaries	$12.23	$16.47	$20.98	$24.52	$29.92	$28.38
Sites and buildings	1.65	4.58	9.54	5.80	4.12	8.01
All other expenses	4.57	7.30	8.19	10.87	16.26	16.26
For all purposes	18.45	28.35	38.71	41.19	50.30	52.65

The expenditure per pupil (enrolled attendance) for 1919 in the Public Schools alone will be found in Table E, and for the R. C. Separate Schools in Table F. The expenditure will there be shown as to rural schools, cities, towns, and villages separately.

II. ROMAN CATHOLIC SEPARATE SCHOOLS

Year	Schools, Teachers and Attendance						
	Schools open	Teachers	Pupils	Boys	Girls	Average daily attendance	Percentage of average attendance to total number attending school
1867	161	210	18,924	.....	.....	8,606	45.47
1872	171	254	21,406	.....	.....	10,584	49.44
1877	185	334	24,952	.....	.....	12,549	50.29
1882	190	390	26,148	.....	.....	13,574	51.91
1887	229	491	30,373	15,376	14,997	16,866	55.52
1892	312	662	37,466	19,169	18,297	21,560	57.54
1897	340	752	41,620	21,342	20,278	24,996	60.05
1902	391	870	45,964	23,314	22,650	28,817	62.69
1907	449	1,034	51,502	26,420	25,082	33,500	65.04
1912	513	1,237	61,297	31,126	30,171	39,735	64.82
1917	548	1,488	70,048	35,036	35,012	46,919	66.98
1918	559	1,526	71,302	35,301	36,001	40,535	56.85
1919	559	1,586	74,833	37,132	37,701	49,289	65.86

Receipts and Expenditures

Year	Receipts				Expenditures					
	Legislative grants	Municipal school grants and assessments	Balances, subscribed and other sources	Total receipts	Teachers' salaries	Sites and building school houses	Libraries, maps, apparatus, prizes, etc.	All other purposes	Total expenditure	Cost per pupil
	$	$	$	$	$	$	$	$	$	$ c.
1867..	9,993	26,781	11,854	48,628	34,830	.....	.....	†7,889	42,719	2 26
1872..	12,327	41,134	15,349	68,810	45,824	.....	.....	†15,993	61,817	2 88
1877..	13,607	72,177	34,482	120,266	70,201	24,510	2,811	17,284	114,806	4 60
1882..	14,382	97,252	55,105	166,739	84,095	36,860	1,303	32,082	154,340	5 13
1887..	16,808	147,639	65,401	229,848	112,293	48,937	3,624	46,369	211,223	6 95
1892..	21,043	206,698	98,293	326,034	149,707	65,874	2,922	71,335	289,838	7 74
1897..	26,675	224,617	84,032	335,324	168,800	41,233	5,786	86,350	302,169	7 26
1902..	30,472	293,348	161,683	485,503	210,199	100,911	6,158	118,173	435,441	9 47
1907..	40,524	442,316	308,540	791,380	281,484	186,908	15,991	229,793	714,176	13 86
1912..	51,846	757,255	377,713	1,186,814	456,800	308,193	15,207	263,024	1,043,224	17 01
1917..	63,127	1,066,253	370,346	1,499,726	635,089	262,103	24,836	391,695	1,313,723	18 75
1918..	68,613	1,330,379	324,642	1,723,634	703,335	176,037	19,600	570,586	1,469,558	20 61
1919..	99,047	1,257,992	946,309	2,303,348	797,523	361,890	25,997	835,371	2,020,781	27 00

†Including all expenditure except for Teachers' salaries.

An increase of 3,531 in the enrolment and of $551,223 in the expenditure in 1919 are noticed in the above tables. The expenditure per pupil of enrolled attendance increased from $20.61 to $27.00 Detailed statistics in reference to these schools will be found in Table F and G.

III. PROTESTANT SEPARATE SCHOOLS

The following is a complete list of the Protestant Separate Schools of the Province:—No. 4 Grattan, No. 2 Hagarty, No. 1 Tilbury North, L'Orignal, and Penetanguishene (two schools).

They were attended by 464 pupils in 1919. The whole amount expended for their maintenance and permanent improvements was $15,647.69. One teacher held a First Class Certificate, nine teachers held Second Class certificates, one held a Third Class, and one held a Temporary certificate.

Complete statistics for these schools will be found in Table Q.

IV. CONTINUATION SCHOOLS

The following table gives statistics of the "Continuation Classes, Grade A," up to and including 1907. Thereafter they are known as "Continuation Schools." Formerly the statistics of these schools were included with the statistics of the Public and Separate Schools, consequently certain items for the years 1897-1907 cannot be given.

Year	Schools	One-teacher schools	Two-teacher schools	Three-teacher schools	Number of teachers	Receipts		Expenditure		Total value of Equipment	No. of Pupils	Percentage of average attendance to total attendance
						Legislative grant	Total Receipts	Paid for Teachers' Salaries	Total Expenditure			
						$	$	$	$	$		
1897.....	27	20	7	....	34	2,700	.....	.....	.....	.....	1,275	.....
1902.....	59	46	12	1	73	8,350	.....	.....	.....	.....	1,856	.....
1907.....	91	65	24	2	119	25,610	.....	73,325	.....	26,345	3,993	.....
1912.....	138	54	73	11	226	64,081	295,261	202,875	265,087	75,556	6,094	61.97
1917.....	137	36	99	2	*241	65,733	360,431	228,362	324,621	93,228	*5,104	*73.15
1918.....	136	36	97	3	*234	71,879	385,944	234,976	332,853	96,813	*5,006	*75.36
1919.....	137	31	104	2	*244	70,356	438,891	253,654	388,701	103,290	*5,126	*77.15

*For school year ended six months after the calendar year specified.

Of the enrolled attendance for 1919-20, 3,995 pupils were in the Lower School and 1,131 in the Middle School. The total attendance was made up of 2,001 boys and 3,125 girls.

Average Cost per pupil, enrolled attendance

	1916	1917	1918	1919
Teachers' salaries.....	$44.17	$44.74	$46.94	$49.48
Sites and buildings.....	4.94	6.33	4.62	9.86
All other expenses.....	11.13	12.53	14.93	16.48
For all purposes	60.24	63.60	66.49	75.82

Average Cost per pupil (average attendance)

	1912	1917	1918	1919
Teachers' salaries	$53.71	$61.15	$62.28	$64.13
Sites and buildings	4.17	8.66	6.13	12.78
All other purposes	12.30	17.12	19.80	21.37
For all purposes	70.18	86.93	88.21	98.28

Statistics in detail for 1919 in reference to the Continuation Schools will be found in Tables H, I and J.

V. COLLEGIATE INSTITUTES AND HIGH SCHOOLS

The following table gives comparative statistics respecting Collegiate Institutes and High Schools from 1867 to 1919, inclusive:—

1. Receipts, Expenditure, Attendance, etc.

Year	Schools	Teachers	Receipts			Expenditure			Pupils	Percentage of average attendance to total attendance
			Legislative grant	Amount of fees	Total receipts	Paid for teachers' salaries	Paid for sites and buildings	Total expenditure		
			$	$	$	$	$	$		
1867	102	159	54,562	15,605	139,579	94,820	*19,190	124,181	5,696	55
1872	104	239	79,543	20,270	223,269	141,812	*31,360	210,005	7,968	56
1877	104	280	78,762	20,753	357,521	211,607	*51,417	343,710	9,229	56
1882	104	332	84,304	29,270	373,150	253,864	*19,361	343,720	12,348	53
1887	112	398	91,977	56,198	529,323	327,452	*73,061	495,612	17,459	59
1892	128	522	100,000	97,273	793,812	472,029	*91,108	696,114	22,837	60
1897	130	579	101,250	110,859	767,487	532,837	*46,627	715,976	24,390	61
1902	134	593	112,650	105,801	832,853	547,402	44,246	769,680	24,472	58.97
1907	143	750	158,549	138,396	1,611,553	783,782	193,975	1,213,697	30,331	60.94
1912	148	917	209,956	145,685	2,414,128	1,232,537	327,982	1,953,061	32,273	62.80
1917	162	†1051	184,088	154,825	3,051,684	1,554,049	277,544	2,418,975	†29,097	†78.15
1918	164	†1088	162,817	166,641	2,855,534	1,637,476	246,013	2,586,114	†30,732	†79.72
1919	167	†1168	170,812	196,256	3,166,222	1,801,602	261,733	2,748,042	†33,036	†81.17

*Expenses for repairs, etc., included.
†For the school year ended six months after the calendar year specified.

Average cost per pupil, enrolled attendance

	1916	1917	1918	1919
Teachers' salaries	$52.34	$53.41	$53.28	$54.53
Sites and buildings	13.83	9.54	8.01	7.92
All other expenses	20.12	20.18	22.86	20.73
For all purposes	86.29	83.13	84.15	83.18

Average cost per pupil (average attendance)

	1902	1907	1912	1917	1918	1919
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Teachers' salaries..	37 93	42 40	60 81	68 34	66 83	67 18
Sites and buildings	3 07	10 49	16 18	12 20	10 04	9 76
All other purposes .	12 34	12 76	19 37	25 83	28 68	25 58
For all purposes .	53 34	65 65	96 36	106 37	105 55	102 47

Number of Pupils in the three grades of schools in the Collegiate Institutes and High Schools

	1916–17	1917–18	1918–19	1919–20
Lower School	20,185	20,190	21,725	23,344
Middle School	7,105	7,336	7,519	8,170
Upper School	1,543	1,571	1,488	1,522
Total enrolment	28,833	29,097	30,732	33,036
Total number of boys	12,339	12,353	13,228	14,681
Total number of girls	16,494	16,744	17,504	18,355

2. Occupation of Parents of Pupils attending High Schools and Collegiate Institutes

	1916–17	1917–18	1918–19	1919–20
Commerce	6,300	6,516	7,194	7,717
Agriculture	8,492	8,449	8,367	8,688
Law, Medicine, Dentistry or the Church	1,498	1,531	1,629	1,569
Teaching	471	511	535	479
The Trades	5,610	5,734	6,237	6,812
Labouring Occupations	2,257	1,899	2,107	2,506
Other Classes	4,205	4,457	4,663	5,265

3. Destination of Pupils, and Number of Schools Charging Fees

Year	Destination of Pupils					Number of schools charging fees	Number of free schools
	Mercantile life	Agriculture	Law, Medicine or the Church	Teaching	The Trades		
1867	.....	.....	.....	.....	.....	67	36
1872	486	300	213	.....	.....	28	76
1877	555	328	564	.....	.....	35	69
1882	881	646	751	.....	.....	37	67
1887	1,141	882	1,189	.....	.....	58	54
1892	1,111	1,006	398	1,527	.....	77	51
1897	1,368	1,133	409	2,056	.....	87	43
1902	1,573	743	388	1,238	.....	82	52
1907	1,982	803	401	1,436	.....	81	62
1912	2,178	855	370	1,490	531	82	66
1917–18	2,742	1,557	*339	1,407	667	85	77
1918–19	2,767	1,582	*447	1,160	641	84	80
1919–20	2,872	1,242	*598	1,104	659	87	80

The statistics in detail of the various Collegiate Institutes and High Schools of the Province for 1919 will be found in Tables K, L and M.

* Including Dentistry.

VI. TEACHERS' INSTITUTES

This table presents the work of the Teachers' Institutes for forty-three years:

Year	No. of Teachers' Institutes	No. of Members	No. of Teachers in the Province. (High School teachers not included)	Receipts				Expenditure	
				Amount received from government grants	Amount received from municipal grants	Amount received from members' fees	Total amount received	Amount paid for Libraries	Total amount expended
				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1877....	42	1,181	6,468	1,412 50	100 00	299 75	2,769 44	.....	1,127 63
1882....	62	4,395	6,857	2,900 00	300 00	1,088 84	9,394 28	453 02	5,355 33
1887....	66	6,781	7,594	1,800 00	1,879 45	730 66	10,405 95	1,234 08	4,975 50
1892....	69	8,142	8,680	1,950 00	2,105 00	875 76	12,043 54	1,472 41	6,127 46
1897....	73	7,627	9,351	2,425 00	2,017 45	901 15	12,446 20	1,479 88	6,598 84
1902....	77	8,515	9,614	2,515 00	1,877 50	1,171 80	13,171 26	1,437 18	7,188 45
1907....	81	9,319	10,170	2,850 00	1,920 00	1,671 32	14,824 09	654 16	7,487 41
1912....	83	*9,913	11,128	3,800 00	2,100 78	1,961 10	22,120 70	1,359 24	10,120 89
1917....	94	*12,460	12,762	5,475 00	3,701 62	3,821 23	27,712 01	3,173 12	13,977 20
1918....	95	*8,869	12,945	6,725 00	4,202 30	3,635 17	30,731 42	5,324 82	15,539 26
1919....	95	*12,767	13,389	6,475 00	4,405 89	4,368 55	33,635 06	7,423 73	19,431 68

*Registered attendance of members; in 1918 many meetings were cancelled owing to the "Influenza" epidemic.

See Appendix L for details for 1919.

VII. DEPARTMENTAL EXAMINATIONS, Etc.

1. Table showing the Number of Teachers in Training at Provincial Normal Schools, and the Pupils at the Normal Model Schools in connection therewith, etc., 1877-1921

Year	No. of Normal School teachers	No. of Normal School students	No. of Normal Model School and Kindergarten teachers	No. of Normal Model School and Kindergarten pupils
1877.....	13	257	8	643
1882.....	16	260	15	799
1887.....	13	441	18	763
1892.....	12	428	22	842
1897.....	13	407	23	832
1902.....	16	619	31	958
1907-08...	*35	428	*38	979 (1907)
1912-13...	*69	986	*38	914 (1912)
1917-18...	*78	1,514	*43	938 (1917)
1919-20...	*77	1,248	*41	876 (1919)
1920-21...	*107	1,328	*42	888 (1920)

*Including those engaged in both a Normal and a Normal Model School.

2. High School Entrance Examinations, 1877-1920

Year	Total number of Candidates examined and recommended by Principals	Number granted certificates	Percentage
1877	7,383	3,836	51.95
1882	9,607	4,371	45.49
1887	16,248	9,364	57.63
1892	16,409	8,427	51.35
1897	16,384	10,502	64.09
1902	18,087	13,300	73.53
1907	22,144	15,430	69.68
1912	22,679	13,977	61.62
1917	21,975	15,751	71.67
1919	24,248	18,552	76.50
1920	27,916	22,051	78.99

3. Departmental Academic and Matriculation Examinations, 1920

Examinations	Total number of Candidates	Number passed	Number of Appeals	Number passed on appeal	Total number passed	Percentage
Senior Public School Graduation	57	28	0	0	28	49.12
Senior High School Entrance	65	30	3	0	30	46.15
Model Entrance (June)	42	19	3	0	19	45.23
English-French Model Entrance (June)	111	91	1	0	91	81.98
Model Entrance (August)	75	50	0	0	50	66.66
English-French Model Entrance (August)	11	7	0	0	7	63.63
Lower School	5,030	3,368	65	3	3,371	67.01
Middle School (June)	4,504	3,134	67	2	3,136	69.62
Middle School (September)	155	64	8	3	67	43.22
Upper School, Part I (June)	382	236	9	0	236	61.78
Upper School, Part II (June)	283	202	2	0	202	71.37
Upper School, Parts I and II (September)	50	13	3	1	14	28.00
Upper School, Parts A, B, C, D (September)	54	19	4	0	19	35.18
Pass Junior Matriculation (June)	5,297	*3,662	133	12	3,674	69.36
Pass Junior Matriculation (September)	645	*163	53	4	167	25.89
Totals	16,761	11,086	331	25	11,111	66.29

Number of Honour Matriculation Candidates (June)	844
Number of Honour Matriculation Candidates (September)	133
Number of Scholarship Matriculation Candidates (June)	124

*Obtained either complete or partial Junior Matriculation.

THE PUBLIC SCHOOLS

I. TABLE A—SCHOOL ATTENDANCE

Rural Schools	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
1 Brant	....	3,631	....	3,631	1,830	1,801	2,337	64
2 Bruce	....	5,145	....	5,143	2,708	2,435	3,336	65
3 Carleton	10	5,668	....	5,678	2,822	2,856	3,451	61
4 Dufferin	3	2,283	....	2,286	1,227	1,059	1,388	61
5 Dundas	....	2,513	....	2,513	1,345	1,168	1,558	62
6 Elgin	4	3,984	....	3,988	2,071	1,917	2,637	66
7 Essex	1	5,494	....	5,495	2,866	2,629	3,060	56
8 Frontenac	28	4,064	....	4,092	2,027	2,065	2,109	52
9 Glengarry	1	2,868	....	2,869	1,442	1,427	1,556	54
10 Grey	12	6,555	....	6,567	3,395	3,172	3,956	60
11 Haldimand	....	2,447	....	2,447	1,250	1,197	1,646	67
12 Haliburton	....	1,529	1	1,530	768	762	700	46
13 Halton	....	2,138	....	2,138	1,112	1,026	1,345	63
14 Hastings	2	6,288	....	6,290	3,209	3,081	3,692	59
15 Huron	3	5,705	....	5,708	2,997	2,711	3,880	68
16 Kent	12	5,827	....	5,839	3,004	2,835	3,451	59
17 Lambton	10	4,877	....	4,887	2,603	2,284	3,165	65
18 Lanark	....	2,806	....	2,806	1,397	1,409	1,806	64
19 Leeds and Grenville	13	5,604	....	5,617	2,819	2,798	3,324	59
20 Lennox and Addington	6	2,924	....	2,930	1,452	1,478	1,760	60
21 Lincoln	6	3,393	....	3,399	1,696	1,703	1,911	56
22 Middlesex	4	6,503	....	6,507	3,274	3,233	4,291	66
23 Norfolk	9	3,414	....	3,423	1,757	1,666	2,059	60
24 Northumberland & Durham	6	6,046	....	6,052	3,127	2,925	3,705	61
25 Ontario	2	4,729	....	4,731	2,389	2,342	2,992	63
26 Oxford	5	4,723	....	4,728	2,471	2,257	3,090	65
27 Peel	1	2,673	....	2,674	1,356	1,318	1,609	60
28 Perth	....	4,105	....	4,105	2,179	1,926	2,844	69
29 Peterborough	9	3,136	1	3,146	1,562	1,584	1,858	59
30 Prescott and Russell	16	2,845	3	2,864	1,483	1,381	1,721	60
31 Prince Edward	....	2,028	....	2,028	1,026	1,002	1,254	62
32 Renfrew	16	5,706	1	5,723	2,895	2,828	3,068	54
33 Simcoe	6	8,238	....	8,244	4,222	4,022	4,874	59
34 Stormont	4	2,628	....	2,632	1,369	1,263	1,567	59
35 Victoria	3	3,188	....	3,191	1,649	1,542	1,990	62
36 Waterloo	3	3,690	....	3,693	1,922	1,771	2,548	69
37 Welland	5	4,576	1	4,582	2,401	2,181	2,717	59
38 Wellington	6	4,287	....	4,293	2,230	2,063	2,758	64
39 Wentworth	6	5,833	....	5,839	2,899	2,940	3,691	63
40 York	3	16,060	....	16,063	8,217	7,846	9,758	61
41 Algoma	5	2,943	....	2,948	1,482	1,466	1,516	51
42 Kenora	4	566	....	570	302	268	287	50
43 Manitoulin	2	1,678	....	1,680	863	817	920	55
44 Muskoka	11	2,688	....	2,699	1,373	1,326	1,406	52
45 Nipissing	6	1,681	1	1,688	889	799	869	51
46 Parry Sound	2	3,731	2	3,735	1,867	1,868	1,845	49
47 Rainy River	1	1,265	....	1,266	636	630	613	48
48 Sudbury	10	3,181	....	3,191	1,566	1,625	1,592	50
49 Timiskaming, etc.	2	3,637	....	3,639	1,876	1,763	1,895	52
50 Thunder Bay	....	2,103	....	2,103	1,029	1,074	1,012	48
Totals	258	203,622	10	203,890	104,351	99,539	122,417	60.04

THE PUBLIC SCHOOLS—Continued

I. TABLE A—SCHOOL ATTENDANCE—Continued

Cities	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
1 Belleville	....	1,908	....	1,908	934	974	1,252	66
2 Brantford	....	4,434	....	4,434	2,241	2,193	3,161	71
3 Chatham	71	2,315	....	2,386	1,212	1,174	1,470	62
4 Fort William	....	3,515	....	3,515	1,755	1,760	2,552	73
5 Galt	....	2,225	....	2,225	1,117	1,108	1,711	77
6 Guelph	2	2,724	1	2,727	1,344	1,383	1,888	69
7 Hamilton	56	18,175	1	18,232	9,155	9,077	13,209	72
8 Kingston	68	3,316	....	3,384	1,686	1,698	2,352	70
9 Kitchener	16	2,989	....	3,005	1,528	1,477	2,242	75
10 London	78	9,790	....	9,868	4,909	4,959	6,559	67
11 Niagara Falls	....	2,150	....	2,150	1,052	1,098	1,538	72
12 Ottawa	181	11,278	....	11,459	5,724	5,735	7,818	68
13 Peterborough	....	3,374	....	3,374	1,755	1,619	2,474	73
14 Port Arthur	....	2,973	....	2,973	1,435	1,538	2,064	69
15 St. Catharines	7	2,935	1	2,943	1,494	1,449	1,900	65
16 St. Thomas	12	2,691	....	2,703	1,377	1,326	2,140	79
17 Sarnia	....	2,137	....	2,137	1,062	1,075	1,605	75
18 Sault Ste. Marie	33	3,639	....	3,672	1,823	1,849	2,489	68
19 Stratford	....	2,632	....	2,632	1,335	1,297	1,947	74
20 Toronto	75	81,099	1	81,175	40,772	40,403	56,271	69
21 Welland	....	1,777	....	1,777	909	868	1,148	65
22 Windsor	....	4,070	....	4,070	2,046	2,024	2,797	69
23 Woodstock	....	1,474	....	1,474	757	717	1,072	73
Totals	599	173,620	4	174,223	87,422	86,801	121,659	69.82
Towns								
1 Alexandria	....	70	....	70	28	42	43	61
2 Alliston	....	257	....	257	122	135	183	71
3 Almonte	....	339	....	339	170	169	241	71
4 Amherstburg	....	296	....	296	149	147	165	56
5 Arnprior	....	507	....	507	253	254	398	78
6 Aurora	....	490	....	490	252	238	337	69
7 Aylmer	25	432	....	457	262	195	326	71
8 Bala	....	86	....	86	31	55	58	67
9 Barrie	....	1,389	....	1,389	702	687	897	65
10 Blenheim	....	344	....	344	169	175	250	73
11 Blind River	....	171	....	171	73	98	108	63
12 Bonfield	....	40	....	40	18	22	21	55
13 Bothwell	....	117	....	117	59	58	86	73
14 Bowmanville	....	580	....	580	303	277	393	68
15 Bracebridge	....	543	....	543	265	278	406	75
16 Brampton	....	828	....	828	413	415	578	70
17 Bridgeburg	....	387	....	387	208	179	268	69
18 Brockville	....	1,371	....	1,371	694	677	1,079	79
19 Bruce Mines	....	171	....	171	84	87	106	62
20 Burlington	....	585	....	585	284	301	323	55
21 Cache Bay	....	135	....	135	66	69	87	64
22 Campbellford	....	633	....	633	307	326	417	66
23 Capreol	....	183	....	183	91	92	70	38
24 Carleton Place	....	809	....	809	400	409	538	67
25 Charlton	....	97	....	97	57	40	39	40
26 Chesley	....	354	....	354	182	172	256	72
27 Clinton	....	325	....	325	154	171	250	77
28 Cobalt	....	875	....	875	446	429	558	64
29 Cobourg	4	700	....	704	346	358	438	62
30 Cochrane	....	372	....	372	179	193	200	54
31 Collingwood	....	1,364	....	1,364	632	732	1,014	74
32 Copper Cliff	48	664	....	712	352	360	505	71
3 Cornwall	....	561	....	561	279	282	424	76

THE PUBLIC SCHOOLS—Continued

I. TABLE A—SCHOOL ATTENDANCE—Continued

Towns—Continued	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
34 Deseronto	2	440	....	442	232	210	285	64
35 Dresden	....	240	....	240	130	110	178	74
36 Dryden	....	250	....	250	105	145	147	59
37 Dundas	....	889	....	889	427	462	636	72
38 Dunnville	....	502	....	502	254	248	358	71
39 Durham	....	311	....	311	149	162	228	73
40 Eastview	....	499	....	499	248	251	232	46
41 Englehart	....	196	....	196	96	100	106	54
42 Essex	....	321	....	321	162	159	210	65
43 Ford	....	266	....	266	113	153	141	53
44 Forest	....	233	....	233	119	114	179	77
45 Fort Frances	....	410	....	410	200	210	280	68
46 Gananoque	....	748	....	748	376	372	527	70
47 Goderich	....	647	....	647	333	314	464	72
48 Gore Bay	....	156	....	156	72	84	115	74
49 Gravenhurst	....	352	....	352	175	177	212	60
50 Haileybury	....	610	....	610	318	292	381	62
51 Hanover	....	523	....	523	246	277	353	67
52 Harriston	1	244	....	245	132	113	175	71
53 Hawkesbury	....	186	....	186	89	97	117	63
54 Hespeler	....	605	....	605	297	308	423	70
55 Huntsville	....	516	....	516	245	271	355	69
56 Ingersoll	....	952	....	952	506	446	662	70
57 Iroquois Falls	....	309	....	309	161	148	167	54
58 Kearney	....	105	....	105	49	56	76	72
59 Keewatin	....	267	....	267	135	132	193	72
60 Kenora	....	968	....	968	505	463	657	68
61 Kincardine	....	334	....	334	182	152	252	75
62 Kingsville	....	412	....	412	213	199	280	68
63 Latchford	....	69	....	69	35	34	49	71
64 Leamington	....	675	....	675	330	345	474	70
65 Lindsay	....	1,201	....	1,201	598	603	877	73
66 Listowel	....	383	....	383	192	191	277	72
67 Little Current	....	187	....	187	87	100	124	66
68 Massey	....	113	....	113	62	51	82	72
69 Matheson	....	132	....	132	79	53	70	53
70 Mattawa	....	45	....	45	21	24	24	53
71 Meaford	....	498	....	498	244	254	364	73
72 Merritton	....	375	....	375	173	202	261	70
73 Midland	....	1,630	....	1,630	804	826	1,096	67
74 Milton	....	364	....	364	171	193	270	74
75 Mimico	....	675	....	675	308	367	427	63
76 Mitchell	....	258	....	258	128	130	184	71
77 Mount Forest	....	226	....	226	109	117	172	76
78 Napanee	....	537	....	537	270	267	373	69
79 New Liskeard	....	508	....	508	244	264	344	68
80 Newmarket	....	671	....	671	334	337	486	72
81 Niagara	....	208	....	208	108	100	160	77
82 North Bay	....	1,346	....	1,346	683	663	995	74
83 Oakville	....	552	....	552	283	269	367	66
84 Orangeville	....	370	....	370	182	188	277	75
85 Orillia	....	1,443	....	1,443	739	704	1,060	73
86 Oshawa	....	1,933	....	1,933	976	957	1,321	68
87 Owen Sound	....	2,323	....	2,323	1,142	1,181	1,689	73
88 Palmerston	....	298	....	298	152	146	216	72
89 Paris	....	701	....	701	345	356	506	72
90 Parkhill	....	140	....	140	70	70	95	68
91 Parry Sound	....	1,153	....	1,153	558	595	723	63
92 Pembroke	47	887	....	934	473	461	679	73

THE PUBLIC SCHOOLS—Continued

I. TABLE A—SCHOOL ATTENDANCE—Concluded

Towns—Concluded	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
*93 Penetanguishene	....	942	....	942	455	487	680	72
94 Perth	....	446	....	446	218	228	337	76
95 Petrolia	....	579	....	579	295	284	394	68
96 Picton	....	507	....	507	258	249	319	63
97 Port Colborne	....	674	....	674	352	322	481	71
98 Port Hope	....	789	....	789	390	399	573	73
99 Powassan	....	146	....	146	61	85	100	68
100 Prescott	6	366	....	372	195	177	237	64
101 Preston	....	832	....	832	427	405	628	75
102 Rainy River	....	361	....	361	190	171	230	64
103 Renfrew	4	620	....	624	327	297	433	69
104 Ridgetown	....	330	....	330	153	177	228	69
105 Rockland	....	72	....	72	40	32	47	65
106 St. Mary's	....	567	....	567	275	292	420	74
107 Sandwich	....	373	....	373	191	182	233	62
108 Seaforth	....	290	....	290	133	157	234	81
109 Simcoe	....	767	....	767	399	368	484	63
110 Sioux Lookout	....	183	....	183	84	99	114	62
111 Smith's Falls	....	1,177	....	1,177	592	585	822	70
112 Southampton	....	348	....	348	177	171	229	66
113 Stayner	....	205	....	203	113	90	134	66
114 Strathroy	....	441	....	441	220	221	298	68
115 Sturgeon Falls	....	204	....	204	101	103	119	58
116 Sudbury	....	960	....	960	484	476	704	73
117 Thessalon	....	407	....	407	180	227	285	70
118 Thornbury	....	186	....	186	101	85	136	73
119 Thorold	....	530	....	530	266	264	362	68
120 Tilbury	....	173	....	173	97	76	109	63
121 Tillsonburg	6	577	....	583	296	287	420	72
122 Timmins	....	336	....	336	168	168	215	64
123 Trenton	....	1,141	....	1,141	579	562	678	59
124 Trout Creek	....	121	....	121	57	64	66	55
125 Uxbridge	....	205	....	205	105	100	164	80
126 Vankleek Hill	....	133	....	133	68	65	102	77
127 Walkerton	....	256	....	256	131	125	179	70
128 Walkerville	2	1,069	....	1,071	551	520	704	66
129 Wallaceburg	....	671	....	671	309	362	463	69
130 Waterloo	....	798	....	798	385	413	633	79
131 Webbwood	....	151	....	151	83	68	94	62
132 Weston	....	655	....	655	337	318	455	69
133 Whitby	....	422	....	422	233	189	298	71
134 Wiarton	....	417	....	417	218	199	242	58
135 Wingham	....	374	....	374	177	197	277	74
Totals	145	69,266	....	69,411	34,670	34,741	47,953	69.08
Totals								
1 Rural Schools	258	203,622	10	203,890	104,351	99,539	122,417	60.04
2 Cities	599	173,620	4	174,223	87,422	86,801	121,659	69.82
3 Towns	145	69,266	....	69,411	34,670	34,741	47,953	69.08
4 Villages	10	24,194	1	24,205	12,053	12,152	16,679	68.90
5 Grand Totals, 1919	1012	470,702	15	471,729	238,496	233,233	308,708	65.44
6 Grand Totals, 1918	846	456,757	12	457,615	231,066	226,549	261,164	57.07
7 Increases	166	13,945	3	14,114	7,430	6,684	47,544	8.37
8 Percentages	.21	99.99	....	.....	50.55	49.44	65.44	.....

* Including Protestant Separate School.

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Rural Schools	Kindergarten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
1 Brant	141	769	495	674	806	724
2 Bruce	.....	1,185	684	936	1,150	1,151
3 Carleton	.....	1,569	726	1,110	1,080	1,182
4 Dufferin	.....	521	290	450	517	479
5 Dundas	.....	621	273	516	496	590
6 Elgin	.....	806	465	703	945	997
7 Essex	.....	1,607	840	1,179	1,057	785
8 Frontenac	.....	1,237	528	713	758	852
9 Glengarry	.....	855	418	603	515	460
10 Grey	.....	1,523	834	1,168	1,525	1,440
11 Haldimand	.....	590	306	456	506	565
12 Haliburton	.....	540	201	299	279	186
13 Halton	.....	555	238	375	509	442
14 Hastings	.....	1,849	796	1,272	1,255	1,071
15 Huron	.....	1,063	650	1,230	1,293	1,282
16 Kent	.....	1,532	804	1,150	1,098	1,177
17 Lambton	.....	1,003	715	849	1,039	1,161
18 Lanark	2	731	361	549	564	584
19 Leeds and Grenville	.....	1,458	1,100	1,019	963	1,044
20 Lennox and Addington	6	774	357	577	578	607
21 Lincoln	5	929	375	695	739	627
22 Middlesex	.....	1,339	796	1,395	1,444	1,462
23 Norfolk	.....	835	451	757	735	623
24 Northumberland and Durham	.....	1,396	764	1,230	1,317	1,252
25 Ontario	.....	1,191	621	919	1,014	941
26 Oxford	.....	1,030	630	908	1,155	941
27 Peel	.....	678	322	469	638	557
28 Perth	5	745	501	600	1,105	1,089
29 Peterborough	.....	912	407	629	635	553
30 Prescott and Russell	.....	930	429	456	441	549
31 Prince Edward	.....	471	293	332	483	421
32 Renfrew	.....	1,763	799	1,122	1,043	930
33 Simcoe	.....	2,110	1,113	1,778	1,722	1,483
34 Stormont	10	708	309	503	482	609
35 Victoria	.....	775	377	625	646	702
36 Waterloo	.....	775	464	825	883	735
37 Welland	82	1,254	628	787	957	824
38 Wellington	.....	884	526	748	958	1,091
39 Wentworth	217	1,496	817	902	1,269	1,076
40 York	52	4,772	2,616	3,602	3,017	1,946
41 Algoma	41	957	360	544	565	454
42 Kenora	4	234	62	106	99	65
43 Manitoulin	20	470	226	281	357	307
44 Muskoka	.....	805	339	478	542	500
45 Nipissing	260	505	253	297	233	139
46 Parry Sound	.....	1,182	537	742	705	506
47 Rainy River	.....	405	162	223	229	223
48 Sudbury	53	1,348	487	512	420	347
49 Timiskaming, etc	129	1,348	420	633	626	480
50 Thunder Bay	63	780	329	596	313	203
Totals	1,090	53,815	27,494	39,322	41,705	38,414

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History
1	22	3,104	3,030	3,156	3,211	3,213	838	1,405
2	37	4,870	3,952	3,671	4,421	4,283	1,529	1,521
3	11	5,409	4,378	4,107	4,896	5,132	1,253	2,557
4	29	2,128	1,708	1,525	1,882	1,792	594	677
5	17	2,433	1,920	1,387	2,029	2,033	774	877
6	72	3,876	3,139	3,556	3,786	3,735	1,034	1,383
7	27	5,366	3,547	3,473	5,008	5,066	1,836	1,594
8	4	4,092	2,891	3,301	4,092	4,092	838	1,726
9	18	2,607	1,977	2,120	2,179	2,315	549	930
10	77	5,960	4,895	4,012	5,213	5,283	1,558	2,315
11	24	2,344	1,742	1,774	1,930	1,906	766	812
12	25	1,526	950	837	1,388	1,400	300	354
13	19	2,013	1,510	1,558	1,817	1,700	534	707
14	47	6,013	4,976	5,803	5,714	5,658	1,168	2,149
15	190	5,227	4,409	3,955	4,901	4,836	1,709	1,963
16	78	5,584	4,248	3,816	4,556	4,755	1,516	2,101
17	120	4,659	3,728	3,211	4,460	4,599	1,401	2,716
18	15	2,787	2,408	1,794	2,437	2,420	735	980
19	33	5,551	3,907	4,083	4,264	4,419	1,498	2,126
20	31	2,645	2,168	2,051	2,472	2,407	665	998
21	29	3,376	2,471	3,002	3,016	2,957	890	1,239
22	71	6,434	5,290	4,730	5,812	5,764	1,800	2,591
23	22	3,331	2,658	2,687	2,988	3,090	674	1,325
24	93	5,666	4,480	4,182	4,917	4,995	1,557	2,026
25	45	4,658	3,313	4,188	3,407	4,449	1,003	1,758
26	64	4,670	3,750	3,303	4,258	4,242	1,133	1,821
27	10	2,578	2,155	1,842	2,347	2,223	646	855
28	60	4,055	3,473	3,332	3,687	3,660	1,450	1,376
29	10	3,016	2,277	1,999	2,443	2,516	492	1,126
30	59	2,823	2,095	1,547	2,202	2,429	671	1,098
31	28	2,028	2,028	1,228	2,028	2,028	561	855
32	66	5,378	4,963	5,572	5,201	5,201	993	2,534
33	38	8,094	7,018	4,758	7,481	7,045	1,830	3,013
34	11	2,488	2,176	1,713	2,319	2,308	747	1,177
35	66	3,100	2,519	2,126	2,664	2,653	805	1,143
36	11	3,693	3,384	3,299	3,693	3,693	902	974
37	50	4,525	3,228	3,396	3,337	3,315	1,123	1,116
38	86	4,157	3,337	3,251	3,650	3,536	1,885	1,643
39	62	5,741	4,445	5,693	5,039	4,590	1,308	2,668
40	58	16,063	14,368	15,579	15,642	14,045	2,906	4,136
41	27	2,925	2,033	2,126	2,341	2,360	574	675
42	....	460	328	410	362	361	96	141
43	19	1,542	1,127	1,020	1,249	1,255	374	591
44	35	2,551	1,817	1,492	2,178	2,066	756	1,005
45	1	1,592	1 081	1,251	1,447	1,422	223	483
46	63	3,615	2,520	3,025	3,701	3,358	731	985
47	24	1,190	922	888	980	973	258	391
48	24	2,727	1,763	2,528	2,187	2,240	530	656
49	3	3,436	2,371	2,870	3,180	3,447	539	914
50	19	2,030	1,437	1,653	1,916	1,933	280	516
	2,050	196,136	156,310	153,880	174,328	175,198	48,832	71,222

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Rural Schools	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration
1 Brant	1,444	2,778	3,019	3,528	17	17
2 Bruce	1,987	3,877	4,181	4,493	41	16
3 Carleton	3,158	4,830	5,091	5,579	5	5
4 Dufferin	914	1,766	1,988	2,189	6	17
5 Dundas	1,042	1,541	1,695	2,464	8	16
6 Elgin	1,924	3,798	3,814	3,856	28	37
7 Essex	1,837	5,090	5,045	5,427	13	18
8 Frontenac	1,728	4,092	4,092	4,092	.....	4
9 Glengarry	1,093	1,970	2,152	2,669	33	4
10 Grey	2,788	4,990	5,606	6,006	25	31
11 Haldimand	1,040	1,763	2,032	2,414	15	30
12 Haliburton	538	1,294	1,460	1,352	17	19
13 Halton	900	1,518	1,866	2,023	8	15
14 Hastings	2,456	5,532	5,437	6,161	33	27
15 Huron	2,485	4,179	4,636	5,342	133	162
16 Kent	2,442	4,279	4,659	5,493	51	44
17 Lambton	2,764	4,164	4,275	4,826	52	93
18 Lanark	1,299	2,232	2,472	2,785	3	14
19 Leeds and Grenville	2,865	4,186	4,467	5,508	3	17
20 Lennox and Addington	1,131	2,294	2,536	2,742	9	10
21 Lincoln	1,399	2,824	3,161	3,378	18	24
22 Middlesex	3,050	4,843	5,281	6,384	85	49
23 Norfolk	1,462	2,769	3,131	3,338	20	18
24 Northumberland and Durham	2,283	4,240	5,085	5,551	40	66
25 Ontario	1,787	2,808	4,529	4,630	46	29
26 Oxford	2,073	4,353	4,515	4,714	37	45
27 Peel	1,033	1,953	2,290	2,632	5	11
28 Perth	1,766	3,473	3,683	3,986	27	35
29 Peterborough	1,188	2,402	2,806	2,723	6	7
30 Prescott and Russell	1,289	2,345	2,300	2,514	40	10
31 Prince Edward	958	2,028	2,028	2,028	9	9
32 Renfrew	2,897	5,012	5,483	5,617	52	55
33 Simcoe	3,420	5,971	6,910	7,556	42	37
34 Stormont	1,252	1,948	2,157	2,570	9	1
35 Victoria	1,346	2,544	2,791	2,872	43	48
36 Waterloo	1,363	3,410	3,673	3,532	1	4
37 Welland	1,539	3,375	3,907	4,238	16	44
38 Wellington	2,011	3,502	3,654	4,057	30	58
39 Wentworth	2,718	4,615	5,158	5,598	34	57
40 York	4,565	14,364	14,901	16,063	41	50
41 Algoma	1,146	2,397	2,643	2,728	19	20
42 Kenora	211	354	384	441	.....	.....
43 Manitoulin	767	1,406	1,531	1,454	16	19
44 Muskoka	1,286	2,090	2,278	2,164	27	34
45 Nipissing	724	1,372	1,445	1,374	.....	1
46 Parry Sound	1,329	3,094	3,433	3,335	61	54
47 Rainy River	459	872	1,073	1,179	20	24
48 Sudbury	1,086	2,351	2,327	2,626	21	26
49 Timiskaming	1,274	2,972	3,239	3,382	4	3
50 Thunder Bay, etc	664	1,967	1,986	2,004	17	18
Totals	84,180	163,827	178,305	193,617	1,286	1,482

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Continued

	Algebra	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
1	17	.....	15	15	.....	15	53	182	28	23
2	14	1	2	.....	.....	3	32	1,161	586	155
3	3	1	.....	.....	.....	.....	.....	671	480	326
4	17	4	12	.....	4	.....	.....	401	129	32
5	16	8	11	6	5	16	.....	1,223	.....	17
6	18	.....	2	.....	.....	29	.....	2,034	794	349
7	19	.....	12	14	570	14	.....	699	32	.....
8	4	.....	1	.....	.....	1	.....	81	13	13
9	6	.....	6	4	89	4	.....	1,099	149	74
10	29	12	4	5	.....	9	5	804	466	31
11	28	5	8	10	.....	25	6	512	.....	.....
12	19	2	.....	.....	.....	12	.....	.....	.....	.....
13	15	8	1	2	.....	7	.....	668	213	40
14	27	5	6	.....	.....	10	.....	1,236	1,138	196
15	138	46	77	10	18	130	55	1,504	266	19
16	35	12	7	4	171	27	.....	2,663	747	.....
17	93	54	45	46	.....	81	17	1,232	903	73
18	12	1	10	2	11	10	.....	834	65	22
19	17	2	15	14	.....	6	.....	1,301	73	58
20	8	2	1	1	.....	1	.....	33	8	.....
21	24	13	8	1	6	20	6	712	146	361
22	35	9	3	3	.....	25	9	2,376	1,956	311
23	14	1	7	2	2	2	.....	419	172	61
24	64	41	40	2	27	47	7	1,057	102	109
25	29	15	15	.....	13	26	13	523	85	.....
26	43	4	10	.....	.....	36	19	1,074	216	34
27	10	5	4	4	.....	5	.....	548	.....	183
28	34	14	20	.....	4	20	.....	2,333	114	.....
29	7	1	2	.....	.....	.....	3	105	.....	19
30	37	13	26	23	791	27	1	228	202	47
31	.....	.....	.....	.....	.....	.....	2	585	1,882	78
32	52	8	24	24	.....	54	.....	311	.....	30
33	22	8	11	2	1	21	19	1,659	364	222
34	.....	.....	.....	.....	.....	.....	.....	740	171	15
35	55	1	9	1	.....	13	13	31	.....	.....
36	4	4	3	.....	1	3	.....	620	426	16
37	39	25	24	15	.....	25	8	562	277	180
38	57	21	29	13	.....	31	11	1,047	459	53
39	54	19	47	12	11	45	21	1,912	817	1,022
40	50	.....	.....	.....	.....	47	.....	3,156	465	248
41	20	14	.....	.....	.....	18	18	518	98	35
42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
43	19	2	18	18	.....	19	.....	25	25	25
44	30	3	13	.....	8	28	8	142	204	27
45	1	.....	.....	.....	534	.....	.....	157	154	26
46	51	21	10	.....	12	51	.....	100	93	35
47	19	3	1	.....	5	14	.....	82	.....	.....
48	22	1	12	.....	42	16	7	83	107	.....
49	3	2	.....	.....	2	3	2	300	245	57
50	18	18	.....	.....	.....	17	.....	16	.....	13
	1,348	429	571	253	2,327	1,013	335	39,759	14,870	4,635

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Cities	Kindergarten	Kindergarten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
1 Belleville	.....	.....	545	279	368	388	328
2 Brantford	.....	508	940	613	808	1,030	535
3 Chatham	258	212	320	299	490	422	385
4 Fort William	356	117	750	505	559	688	540
5 Galt	.....	131	522	252	468	501	351
6 Guelph	145	188	482	328	437	549	445
7 Hamilton	1,677	139	3,011	2,424	4,330	3,843	2,593
8 Kingston	145	190	744	484	393	778	650
9 Kitchener	165	108	487	375	709	682	479
10 London	873	225	1,423	1,191	2,174	1,998	1,984
11 Niagara Falls	.....	.....	601	335	425	397	392
12 Ottawa	1,365	.....	1,724	1,490	1,528	2,686	2,261
13 Peterborough	193	271	698	440	600	611	561
14 Port Arthur	258	.....	605	437	668	443	562
15 St. Catharines	.....	262	644	431	415	626	565
16 St. Thomas	.....	305	584	281	418	585	530
17 Sarnia	.....	.....	423	330	407	508	469
18 Sault Ste. Marie	410	109	743	513	573	689	635
19 Stratford	.....	256	421	310	354	647	644
20 Toronto	9,331	.....	14,179	9,115	16,285	17,440	14,320
21 Welland	143	.....	434	278	349	374	199
22 Windsor	.....	.....	1,424	644	871	672	459
23 Woodstock	.....	.....	413	193	232	323	313
Totals	15,369	3,021	32,117	21,547	33,861	36,880	30,200
Towns							
1 Alexandria	.....	.....	20	8	14	15	13
2 Alliston	.....	.....	92	40	42	42	41
3 Almonte	.....	.....	88	40	83	65	63
4 Amherstburg	.....	.....	133	55	36	28	44
5 Arnprior	.....	.....	106	72	80	154	95
6 Aurora	.....	.....	113	71	91	142	73
7 Aylmer	33	38	44	45	90	83	124
8 Bala	.....	.....	26	4	11	24	10
9 Barrie	.....	90	354	168	339	209	229
10 Blenheim	.....	.....	102	51	46	41	104
11 Blind River	.....	.....	69	22	14	26	40
12 Bonfield	.....	.....	17	4	9	6	4
13 Bothwell	.....	.....	22	13	30	19	33
14 Bowmanville	.....	.....	143	96	136	101	104
15 Bracebridge	.....	.....	180	60	125	100	78
16 Brampton	.....	.....	181	175	214	141	117
17 Bridgeburg	.....	71	53	40	54	77	92
18 Brockville	.....	.....	363	201	198	287	322
19 Bruce Mines	.....	.....	62	40	24	27	18
20 Burlington	.....	167	94	89	90	80	74
21 Cache Bay	.....	.....	40	15	25	26	26
22 Campbellford	.....	.....	142	97	115	137	142
23 Capreol	.....	.....	88	47	30	8	10
24 Carleton Place	.....	.....	233	170	136	131	139
25 Charlton	.....	.....	28	11	30	12	16
26 Chesley	.....	.....	74	44	74	80	82
27 Clinton	.....	.....	83	36	33	68	105
28 Cobalt	.....	.....	297	114	189	152	123
29 Cobourg	41	35	120	98	179	122	109
30 Cochrane	.....	.....	140	52	77	50	53
31 Collingwood	114	.....	318	172	259	253	248
32 Copper Cliff	64	.....	225	118	148	74	83
33 Cornwall	.....	.....	138	79	84	148	112

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Continued

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History
1	.....	1,908	1,908	1,908	1,908	1,908	328	408	751
2	.....	4,434	4,434	4,434	4,434	4,434	535	758	1,122
3	.....	1,983	1,636	2,163	1,983	1,938	557	867	931
4	.....	3,159	2,292	3,159	3,159	3,159	540	1,228	1,228
5	.....	2,225	2,225	2,225	2,225	2,225	428	582	1,121
6	153	2,241	2,048	2,377	2,290	2,235	785	1,004	1,230
7	215	16,742	14,903	18,232	16,237	16,087	3,265	6,579	9,084
8	.....	3,237	2,492	3,384	3,059	2,835	650	1,091	1,383
9	.....	3,005	3,005	3,005	3,005	3,005	479	2,923	2,923
10	.....	9,062	8,424	9,138	8,777	8,819	1,984	4,203	5,189
11	.....	2,150	1,608	2,150	1,741	1,893	487	551	774
12	405	10,094	10,094	11,459	10,094	10,094	2,511	4,908	5,096
13	.....	3,181	2,212	3,374	3,181	3,181	561	1,172	1,772
14	.....	2,715	2,110	2,973	2,715	2,110	562	1,005	1,005
15	.....	2,681	1,606	.....	1,606	1,606	565	1,191	1,191
16	.....	2,431	1,989	1,968	2,300	2,195	515	672	938
17	.....	2,137	2,137	2,137	2,137	2,137	469	1,369	1,369
18	.....	3,339	2,735	3,410	3,219	3,194	749	730	934
19	.....	2,632	2,632	2,632	2,632	2,632	863	728	1,212
20	455	71,637	67,393	73,075	70,353	69,593	20,944	25,465	36,050
21	.....	1,634	1,200	1,777	1,777	1,777	573	573	573
22	.....	4,070	2,302	4,070	2,646	2,646	459	459	1,131
23	.....	1,474	1,016	1,474	1,474	1,016	313	257	428
	1,228	158.171	142,401	160,524	152,952	150,719	39,122	58,723	77,435
1	.....	50	50	70	50	50	13	50	50
2	.....	257	165	257	257	257	56	59	105
3	.....	339	251	339	339	339	63	128	211
4	.....	296	163	252	296	296	72	30	72
5	.....	507	507	507	507	507	95	507	507
6	.....	490	490	490	377	377	73	73	135
7	.....	386	348	424	386	386	164	348	348
8	11	86	60	86	60	86	45	55	56
9	.....	1,389	1,281	1,389	829	1,281	229	229	762
10	.....	344	242	344	344	344	104	147	104
11	.....	171	171	171	171	171	23	23	171
12	.....	40	23	40	23	40	4	2	23
13	.....	117	117	.....	95	95	33	52	52
14	.....	580	437	580	580	580	104	119	151
15	.....	543	363	.....	543	543	123	178	178
16	.....	647	472	828	647	647	117	80	117
17	.....	387	223	387	223	263	169	169	169
18	.....	1,371	1,371	1,371	1,371	1,371	322	1,371	1,371
19	.....	171	109	171	171	171	18	18	45
20	.....	585	513	545	585	585	434	428	439
21	3	135	135	132	132	132	29	125	135
22	.....	633	633	633	633	633	633	100	142
23	.....	183	183	183	183	183	10	1	9
24	.....	809	576	809	576	576	139	139	270
25	.....	97	69	97	97	97	28	16	28
26	.....	354	298	354	293	354	82	248	264
27	.....	325	325	325	325	325	105	325	325
28	.....	875	875	875	875	875	123	307	515
29	.....	628	508	704	628	628	109	103	128
30	.....	372	232	372	372	372	53	180	180
31	.....	1,241	899	946	1,146	1,187	315	352	515
32	.....	648	423	648	423	423	157	83	157
33	.....	561	561	561	561	561	112	217	152

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Cities—Concluded	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration	Algebra
1 Belleville	1,908	1,908	1,908	.....	.....	.....
2 Brantford	4,434	4,434	4,434	.....	.....	.....
3 Chatham	2,199	1,983	2,089	.....	.....	.....
4 Fort William	3,159	3,159	3,159	.....	.....	.....
5 Galt	2,146	2,225	2,019	.....	.....	.....
6 Guelph	2,157	2,217	2,596	153	153	.....
7 Hamilton	15,723	16,510	18,232	215	215	215
8 Kingston	2,947	3,260	2,845	.....	.....	.....
9 Kitchener	3,005	3,005	3,005	.....	.....	.....
10 London	9,099	9,190	9,153	.....	.....	.....
11 Niagara Falls	1,998	1,998	2,150	.....	.....	.....
12 Ottawa	10,094	10,094	10,094	186	405	.....
13 Peterborough	3,181	3,181	3,374	.....	.....	.....
14 Port Arthur	2,715	2,715	2,715	.....	.....	.....
15 St. Catharines	1,191	2,037	2,943	.....	.....	.....
16 St. Thomas	2,473	2,500	2,332	.....	.....	.....
17 Sarnia	2,137	2,137	2,137	.....	.....	.....
18 Sault Ste. Marie	3,362	3,368	3,476	.....	.....	.....
19 Stratford	2,632	2,632	2,632	.....	.....	.....
20 Toronto	67,793	71,878	73,728	455	455	403
21 Welland	1,149	1,777	1,777	.....	.....	.....
22 Windsor	2,646	4,070	4,070	.....	.....	.....
23 Woodstock	708	1,474	1,474	.....	.....	.....
Totals	148,856	157,752	162,342	1,009	1,228	618
Towns						
1 Alexandria	70	70	70	.....	.....	.....
2 Alliston	257	257	257	.....	.....	.....
3 Almonte	339	339	339	.....	.....	.....
4 Amherstburg	296	296	296	.....	.....	.....
5 Arnprior	507	507	507	.....	.....	.....
6 Aurora	377	490	490	.....	.....	.....
7 Aylmer	386	424	424	.....	.....	.....
8 Bala	86	86	86	11	11	11
9 Barrie	882	1,389	1,389	.....	.....	.....
10 Blenheim	344	344	344	.....	.....	.....
11 Blind River	171	171	171	.....	.....	.....
12 Bonfield	40	23	40	.....	.....	.....
13 Bothwell	95	117	95	.....	.....	.....
14 Bowmanville	580	580	580	.....	.....	.....
15 Bracebridge	303	543	543	.....	.....	.....
16 Brampton	472	472	828	.....	.....	.....
17 Bridgeburg	387	387	387	.....	.....	.....
18 Brockville	1,371	1,371	1,371	.....	.....	.....
19 Bruce Mines	171	171	171	.....	.....	.....
20 Burlington	513	585	585	.....	.....	.....
21 Cache Bay	132	132	135	3	3	3
22 Campbellford	633	633	633	.....	.....	.....
23 Capreol	183	183	183	.....	.....	.....
24 Carleton Place	576	809	809	.....	.....	.....
25 Charlton	97	97	97	.....	.....	.....
26 Chesley	354	354	354	.....	.....	.....
27 Clinton	325	325	325	.....	.....	.....
28 Cobalt	875	875	875	.....	.....	.....
29 Cobourg	410	663	663	.....	.....	.....
30 Cochrane	372	372	372	.....	.....	.....
31 Collingwood	936	1,148	1,247	.....	.....	.....
32 Copper Cliff	157	423	648	.....	.....	.....
33 Cornwall	561	561	561	.....	.....	.....

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Continued

	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
1	.....	.....	.....	.....	.....	.....	.....	1,102	112
2	.....	.....	.....	.....	.....	.....	607	506	545
3	.....	.....	.....	.....	.....	.....	.....	900	614
4	.....	.....	.....	.....	.....	.....	69	243	297
5	.....	.....	.....	.....	.....	.....	228	158	193
6	.....	.....	.....	.....	.....	153	54	437	537
7	112	.....	.....	.....	.....	215	.....	2,129	1,784
8	.....	.....	.....	.....	.....	.....	.....	3,376	529
9	.....	.....	.....	.....	.....	.....	121	2,647	128
10	.....	.....	.....	.....	.....	.....	953	1,342	1,366
11	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	.....	.....	.....	.....	219	405	1,969	2,832	3,572
13	.....	.....	.....	.....	.....	.....	141	150	160
14	.....	.....	.....	.....	.....	.....	85	234	328
15	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	1,058	752	693
17	.....	.....	.....	.....	.....	.....	.....	404	537
18	.....	.....	.....	.....	.....	.....	199	1,895	1,538
19	.....	.....	.....	.....	.....	.....	824	656	604
20	325	.....	.....	.....	56	440	.....	67,901	47,643
21	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	591	540
23	.....	.....	.....	.....	.....	.....	.....	313	313
	437	.....	.....	.....	275	1,213	6,308	88,568	62,033
1	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....	28	.....	.....
3	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	.....	.....	.....	.....	.....	.....	73	.....	.....
7	.....	.....	.....	.....	.....	.....	40	.....	.....
8	.....	.....	.....	.....	11	11	45	.....	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....	287	303	306
19	.....	.....	.....	.....	.....	.....	.....	102	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	3	.....	.....	.....	3	2	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	.....	133	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	.....
26	.....	.....	.....	.....	.....	.....	.....	106	.....
27	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	.....	.....	.....	.....	.....	.....	.....	875	.....
39	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	.....	.....	.....	.....	.....	.....	.....	198	303
32	.....	.....	.....	.....	.....	.....	.....	.....	.....
33	.....	.....	.....	.....	.....	.....	.....	561	110

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns—Continued	Kinder-garten	Kinder-garten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
34 Deserouto	.....	.....	101	82	127	69	63
35 Dresden	.....	.....	76	42	39	37	46
36 Dryden	.....	.....	45	47	57	51	50
37 Dundas	.....	135	101	122	121	194	216
38 Dunnville	.....	.....	145	84	112	77	84
39 Durham	.....	.....	93	43	63	42	70
40 Eastview	.....	.....	165	77	129	81	47
41 Englehart	.....	56	32	26	35	33	14
42 Essex	.....	50	45	49	69	49	59
43 Ford	.....	.....	104	41	39	57	25
44 Forest	.....	.....	46	45	35	52	55
45 Fort Frances	.....	22	69	67	94	78	80
46 Gananoque	.....	.....	158	119	168	146	157
47 Goderich	22	19	110	58	144	136	158
48 Gore Bay	.....	.....	29	14	41	38	34
49 Gravenhurst	.....	.....	91	49	73	95	43
50 Haileybury	.....	.....	176	77	162	115	80
51 Hanover	.....	41	43	69	180	111	79
52 Harriston	.....	.....	53	45	40	48	59
53 Hawkesbury	.....	.....	59	19	22	36	50
54 Hespeler	.....	86	88	90	136	91	110
55 Huntsville	.....	.....	147	86	136	75	72
56 Ingersoll	84	.....	152	150	132	251	183
57 Iroquois Falls	.....	.....	181	22	35	38	32
58 Kearney	.....	.....	18	14	16	26	22
59 Keewatin	.....	.....	51	39	49	65	63
60 Kenora	.....	43	199	139	179	226	182
61 Kincardine	.....	.....	82	46	57	72	77
62 Kingsville	.....	45	63	47	93	77	61
63 Latchford	.....	.....	22	14	15	11	7
64 Leamington	.....	.....	195	82	145	126	127
65 Lindsay	.....	.....	310	137	278	255	221
66 Listowel	.....	.....	96	41	49	76	121
67 Little Current	.....	.....	36	34	39	38	40
68 Massey	.....	.....	33	5	24	19	32
69 Matheson	.....	.....	41	25	13	32	21
70 Mattawa	.....	.....	8	9	12	4	12
71 Meaford	.....	.....	99	67	118	91	123
72 Merritton	.....	21	109	39	59	76	71
73 Midland	.....	.....	431	263	427	266	243
74 Milton	.....	.....	79	50	94	80	61
75 Mimico	.....	.....	159	89	112	144	125
76 Mitchell	.....	.....	30	27	37	69	95
77 Mount Forest	.....	.....	38	28	47	43	70
78 Napanee	.....	.....	138	76	112	98	113
79 New Liskeard	.....	.....	150	86	108	78	86
80 Newmarket	.....	.....	180	74	152	140	125
81 Niagara	.....	.....	47	29	54	36	42
82 North Bay	50	.....	289	192	273	242	300
83 Oakville	.....	.....	130	94	99	104	125
84 Orangeville	.....	.....	79	66	58	77	90
85 Orillia	.....	.....	305	201	366	240	331
86 Oshawa	.....	.....	584	319	334	411	285
87 Owen Sound	206	25	342	319	546	425	460
88 Palmerston	.....	11	48	54	89	59	37
89 Paris	.....	.....	145	91	107	179	179
90 Parkhill	.....	.....	28	12	21	36	43
91 Parry Sound	.....	.....	372	152	225	173	231
92 Pembroke	126	.....	166	112	157	204	169
93*Penetanguishene	.....	.....	286	119	221	160	156

*Including Protestant Separate School.

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Continued

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History
34	.....	442	442	442	442	442	63	132	132
35	.....	240	164	157	164	122	83	122	122
36	.....	250	250	100	150	150	50	30	20
37	.....	889	531	889	889	889	410	315	410
38	.....	502	395	.....	502	502	114	104	122
39	.....	311	175	311	218	218	112	175	175
40	.....	499	322	426	426	499	47	322	322
41	.....	196	196	196	196	196	182	25	30
42	.....	321	220	.....	220	271	220	59	108
43	.....	266	162	266	266	266	82	25	82
44	.....	233	187	233	233	233	55	142	142
45	.....	274	274	274	274	410	80	80	158
46	.....	748	590	568	748	748	157	471	471
47	.....	647	498	647	498	498	294	375	375
48	.....	129	129	.....	129	156	34	79	79
49	1	352	320	352	352	352	139	134	199
50	.....	610	434	610	434	434	80	195	357
51	.....	523	523	523	523	523	79	40	39
52	.....	245	245	138	245	245	107	107	147
53	.....	186	186	186	186	186	50	186	186
54	4	605	605	605	605	605	114	114	205
55	.....	516	321	516	447	447	72	117	259
56	.....	868	868	952	868	868	183	97	566
57	1	309	106	309	309	309	33	71	71
58	9	105	105	105	105	105	31	59	59
59	.....	216	216	267	216	216	63	90	177
60	.....	968	968	968	968	726	182	587	587
61	.....	334	334	334	334	334	77	159	196
62	26	367	257	412	257	257	164	61	103
63	.....	69	69	69	69	69	17	18	33
64	.....	675	675	675	675	675	253	135	332
65	.....	1,201	891	1,201	1,201	1,201	221	725	620
66	.....	383	246	383	383	383	197	118	157
67	.....	187	151	187	187	151	40	78	78
68	.....	113	113	113	113	113	32	21	11
69	.....	132	91	132	91	91	21	34	53
70	.....	45	45	45	45	45	12	16	16
71	.....	498	498	498	498	498	157	253	398
72	.....	346	255	375	267	288	71	174	185
73	.....	1,630	999	1,630	1,630	1,630	243	251	220
74	.....	364	364	364	364	364	61	141	141
75	46	675	516	675	675	675	171	172	182
76	.....	258	201	258	258	258	164	95	164
77	.....	226	226	.....	226	226	113	113	113
78	.....	537	399	537	537	537	113	60	113
79	.....	358	358	358	508	272	86	86	164
80	.....	671	491	671	491	671	125	122	105
81	.....	208	208	208	208	208	42	25	39
82	.....	1,296	695	1,296	1,296	1,296	300	394	542
83	.....	552	552	552	552	552	125	453	500
84	.....	370	370	370	325	325	90	136	167
85	.....	1,443	1,443	1,443	1,443	1,443	331	606	710
86	.....	1,933	1,228	1,933	1,403	1,403	285	448	593
87	.....	2,052	1,702	2,163	1,954	1,683	652	441	999
88	.....	298	298	298	298	298	96	96	96
89	.....	701	701	701	701	701	179	556	701
90	.....	140	140	140	140	140	43	41	63
91	.....	1,153	781	1,153	781	1,153	404	469	520
92	.....	808	808	808	808	808	169	197	333
93	.....	942	855	942	743	700	156	247	301

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns—Continued	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration	Algebra
34 Deseronto	442	442	442	.....	.....	.....
35 Dresden	157	240	240	.....	.....	.....
36 Dryden	105	180	250	.....	.....	.....
37 Dundas	889	889	889	.....	.....	.....
38 Dunnville	502	502	502	.....	.....	.....
39 Durham	311	311	311	.....	.....	.....
40 Eastview	499	499	499	.....	.....	.....
41 Englehart	196	196	196	.....	.....	.....
42 Essex	321	321	321	.....	.....	.....
43 Ford	266	266	266	.....	.....	.....
44 Forest	233	233	233	.....	.....	.....
45 Fort Frances	389	274	410	.....	.....	.....
46 Gananoque	748	748	748	.....	.....	.....
47 Goderich	417	417	647	114	.....	.....
48 Gore Bay	156	156	156	.....	.....	.....
49 Gravenhurst	338	352	352	.....	.....	.....
50 Haileybury	434	434	610	.....	.....	.....
51 Hanover	523	523	523	.....	.....	.....
52 Harriston	160	245	186	.....	.....	.....
53 Hawkesbury	186	186	186	.....	.....	.....
54 Hespeler	341	605	605	4	4	4
55 Huntsville	275	447	516	.....	.....	.....
56 Ingersoll	868	868	952	97	.....	.....
57 Iroquois Falls	309	309	309	1	1	1
58 Kearney	105	105	105	31	9	9
59 Keewatin	216	267	267	.....	.....	.....
60 Kenora	968	968	968	.....	.....	.....
61 Kincardine	279	334	334	.....	.....	.....
62 Kingsville	412	412	412	.....	26	26
63 Latchford	69	69	69	.....	.....	.....
64 Leamington	675	675	675	.....	.....	.....
65 Lindsay	1,201	1,201	1,201	.....	.....	.....
66 Listowel	197	383	383	.....	.....	.....
67 Little Current	187	187	187	.....	.....	.....
68 Massey	113	113	113	.....	.....	.....
69 Matheson	132	132	132	.....	.....	.....
70 Mattawa	45	45	45	.....	.....	.....
71 Meaford	498	498	498	.....	.....	.....
72 Merritton	319	347	347	.....	.....	.....
73 Midland	790	1,630	1,630	.....	.....	.....
74 Milton	364	364	364	.....	.....	.....
75 Mimico	125	629	675	46	46	46
76 Mitchell	228	258	258	.....	.....	.....
77 Mount Forest	226	226	226	.....	.....	.....
78 Napanee	537	537	537	.....	.....	.....
79 New Liskeard	272	358	508	.....	.....	.....
80 Newmarket	491	671	590	.....	.....	.....
81 Niagara	132	208	208	42	.....	.....
82 North Bay	1,296	1,296	1,296	.....	.....	.....
83 Oakville	552	552	552	.....	.....	.....
84 Orangeville	370	370	370	.....	.....	.....
85 Orillia	1,443	1,443	1,443	.....	.....	.....
86 Oshawa	1,933	1,933	1,933	.....	.....	.....
87 Owen Sound	1,983	1,983	1,983	.....	.....	.....
88 Palmerston	298	298	298	.....	.....	.....
89 Paris	701	701	701	.....	.....	.....
90 Parkhill	140	140	140	.....	.....	.....
91 Parry Sound	1,102	1,153	1,153	.....	.....	.....
92 Pembroke	808	808	808	.....	.....	.....
93*Penetanguishene	672	743	942	.....	.....	.....

* Including Protestant Separate School.

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Continued

	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
34	.....	.....	.....	.....	.....	.....	.....	310	.....
35	.....	.....	.....	.....	.....	.....	.....	.....	.....
36	.....	.....	.....	.....	.....	.....	.....	.....	.....
37	.....	.....	.....	.....	.....	.....	410	.....	.....
38	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	.....	.....	.....	.....	.....	.....	.....	70	44
40	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	.....	.....	.....	.....	.....	.....	75	.....	.....
43	.....	.....	.....	.....	.....	.....	.....	40	42
44	.....	.....	.....	.....	.....	.....	.....	.....	.....
45	.....	.....	.....	.....	.....	.....	.....	.....	.....
46	.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....	.....	.....	.....	.....	.....	.....	.....	.....
48	.....	.....	.....	.....	.....	.....	.....	.....	.....
49	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....	.....	.....	.....	.....	.....	.....	.....	41
51	.....	.....	.....	.....	.....	.....	.....	.....	.....
52	.....	.....	.....	.....	.....	.....	.....	.....	.....
53	.....	.....	.....	.....	.....	.....	86	.....	.....
54	4	.....	.....	.....	4	.....	205	.....	.....
55	.....	.....	.....	.....	.....	.....	.....	.....	.....
56	.....	.....	.....	.....	.....	.....	.....	222	212
57	.....	1	.....	.....	1	.....	.....	.....	.....
58	9	2	2	.....	9	2	.....	.....	.....
59	.....	.....	.....	.....	.....	.....	.....	.....	.....
60	.....	.....	.....	.....	.....	.....	.....	.....	.....
61	.....	.....	.....	.....	.....	.....	.....	36	.....
62	.....	26	26	.....	26	.....	26	.....	.....
63	.....	.....	.....	.....	.....	.....	18	69	.....
64	.....	.....	.....	.....	.....	.....	.....	.....	.....
65	.....	.....	.....	.....	.....	.....	.....	.....	.....
66	.....	.....	.....	.....	.....	.....	245	383	.....
67	.....	.....	.....	.....	.....	.....	.....	.....	.....
68	.....	.....	.....	.....	.....	.....	.....	.....	.....
69	.....	.....	.....	.....	.....	.....	.....	.....	.....
70	.....	.....	.....	.....	.....	.....	.....	.....	.....
71	.....	.....	.....	.....	.....	.....	.....	.....	.....
72	.....	.....	.....	.....	.....	124	.....	.....	.....
73	.....	.....	.....	.....	.....	.....	425	1,630	.....
74	.....	.....	.....	.....	.....	.....	61	.....	.....
75	18	31	46	.....	46	46	.....	.....	.....
76	.....	.....	.....	.....	.....	.....	129	88	76
77	.....	.....	.....	.....	.....	.....	.....	.....	.....
78	.....	.....	.....	.....	.....	.....	.....	.....	.....
79	.....	.....	.....	.....	.....	.....	.....	193	.....
80	.....	.....	.....	.....	.....	.....	122	.....	.....
81	.....	.....	.....	.....	.....	.....	.....	.....	.....
82	.....	.....	.....	.....	.....	.....	268	171	177
83	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	.....	.....	.....	.....	.....	.....	.....	370	.....
85	.....	.....	.....	.....	.....	.....	316	.....	.....
86	.....	.....	.....	.....	.....	.....	.....	.....	.....
87	.....	.....	.....	.....	.....	.....	166	365	417
88	.....	.....	.....	.....	.....	.....	.....	.....	.....
89	.....	.....	.....	.....	.....	.....	.....	.....	.....
90	.....	.....	.....	.....	.....	.....	.....	.....	.....
91	.....	.....	.....	.....	.....	.....	.....	.....	.....
92	.....	.....	.....	.....	.....	.....	373	473	461
93	.....	.....	.....	.....	.....	.....	.....	322	.....

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns—Continued	Kindergarten	Kindergarten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
94 Perth	.....	.....	91	49	146	83	77
95 Petrolea	.....	.....	159	76	75	123	146
96 Picton	21	46	95	58	71	106	110
97 Port Colborne	.....	.....	233	98	88	150	105
98 Port Hope	.....	.....	207	137	126	175	144
99 Powassan	.....	.....	34	18	19	20	55
100 Prescott	.....	38	59	36	44	82	113
101 Preston	.....	78	151	76	193	193	141
102 Rainy River	.....	.....	149	44	61	58	31
103 Renfrew	37	32	78	79	107	151	140
104 Ridgetown	.....	.....	91	35	62	58	84
105 Rockland	.....	.....	12	5	14	18	23
106 St. Mary's	.....	.....	103	108	101	143	112
107 Sandwich	.....	.....	81	74	111	63	44
108 Seaforth	31	38	50	44	43	36	48
109 Simcoe	.....	71	116	98	234	126	122
110 Sioux Lookout	.....	.....	70	29	33	29	14
111 Smith's Falls	.....	.....	347	168	208	205	249
112 Southampton	.....	.....	111	45	67	55	70
113 Stayner	.....	.....	41	25	46	48	43
114 Strathroy	.....	.....	115	49	92	83	102
115 Sturgeon Falls	.....	.....	71	31	35	40	27
116 Sudbury	.....	.....	294	129	190	173	174
117 Thessalon	.....	.....	107	60	89	95	56
118 Thornbury	.....	.....	25	21	51	38	51
119 Thorold	.....	.....	165	65	106	101	93
120 Tilbury	.....	.....	37	22	27	50	37
121 Tillsonburg	48	.....	93	89	116	125	112
122 Timmins	.....	64	80	44	53	41	54
123 Trenton	.....	.....	403	162	218	212	146
124 Trout Creek	.....	.....	39	10	18	27	24
125 Uxbridge	.....	.....	62	39	34	44	26
126 Vankleek Hill	.....	.....	29	4	30	23	47
127 Walkerton	.....	.....	69	19	66	42	60
128 Walkerville	.....	110	187	132	255	169	218
129 Wallaceburg	.....	.....	194	77	135	137	128
130 Waterloo	106	.....	110	95	193	161	133
131 Webbwood	.....	.....	45	26	28	33	19
132 Weston	.....	.....	126	91	141	142	155
133 Whitby	.....	.....	107	60	74	89	92
134 Wiarton	.....	.....	79	66	122	80	70
135 Wingham	34	.....	54	49	46	91	100
Totals	1,017	1,432	16,654	9,694	14,047	13,304	13,133
Totals							
1 Rural Schools	.....	1,090	53,815	27,494	39,322	41,705	38,414
2 Cities	15,369	3,021	32,117	21,547	33,861	36,880	30,200
3 Towns	1,017	1,432	16,654	9,694	14,047	13,304	13,133
4 Villages	.....	259	5,554	3,535	4,645	4,926	5,040
5 Grand Totals, 1919	16,386	5,802	108,140	62,270	91,875	96,815	86,787
6 Grand Totals, 1918	15,709	4,485	103,089	60,515	90,606	96,602	82,561
7 Increases	677	1,317	5,051	1,755	1,269	213	4,226
8 Decreases	.....	.....	.....	.....	.....	.....	.....
9 Percentages	3.47	1.23	22.92	13.20	19.48	20.52	18.40

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Continued

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History
94	.....	446	355	446	355	306	77	160	160
95	.....	579	344	579	344	579	146	344	344
96	.....	486	486	486	486	486	110	302	345
97	.....	343	343	674	343	343	255	56	255
98	.....	789	789	789	789	789	319	166	239
99	.....	146	112	146	146	146	55	41	42
100	.....	372	275	303	275	275	113	69	113
101	.....	832	603	832	832	754	141	146	376
102	18	361	212	361	361	361	49	48	107
103	.....	624	400	624	624	624	140	178	378
104	.....	330	330	.....	330	330	84	75	67
105	.....	72	55	72	60	72	23	60	60
106	.....	567	567	567	567	567	200	153	150
107	.....	373	292	373	373	292	44	29	107
108	.....	259	206	290	206	206	84	84	84
109	.....	767	696	767	696	696	122	696	696
110	8	183	183	183	183	183	22	22	84
111	.....	1,177	612	1,177	662	1,177	367	518	533
112	.....	348	348	348	348	348	70	74	125
113	.....	162	137	203	203	203	43	109	117
114	.....	441	319	441	277	441	185	148	185
115	.....	204	204	204	204	204	27	58	49
116	.....	960	960	960	960	960	174	109	65
117	.....	407	300	407	300	300	56	41	15
118	.....	186	186	186	161	161	51	34	89
119	.....	530	365	460	491	530	93	78	167
120	.....	173	134	173	112	141	112	112	53
121	.....	583	583	.....	535	535	196	196	153
122	.....	336	148	192	148	192	95	54	95
123	.....	1,141	1,141	1,141	1,141	1,141	146	344	354
124	3	121	121	.....	121	121	27	27	37
125	.....	205	205	205	205	205	26	70	70
126	.....	133	104	133	133	70	70	70	70
127	.....	256	210	256	210	210	60	102	210
128	.....	1,071	774	1,071	1,071	1,071	218	219	253
129	.....	671	477	671	671	671	128	306	400
130	.....	798	692	798	798	798	215	253	202
131	.....	151	104	151	104	97	26	70	70
132	.....	655	438	655	655	438	297	297	229
133	.....	422	315	422	312	252	92	111	181
134	.....	417	279	.....	274	274	70	44	70
135	.....	340	340	340	340	340	191	191	191
	130	67,449	55,204	63,940	61,578	62,688	17,491	23,720	29,934
1	2,050	196,136	156,310	153,880	174,328	175,198	48,832	71,222	84,180
2	1,228	158,171	142,401	160,524	152,952	150,719	39,122	58,723	77,435
3	130	67,449	55,204	63,940	61,578	62,688	17,491	23,720	29,934
4	246	23,394	19,826	19,178	21,458	21,605	6,398	9,699	11,450
5	3,654	445,150	373,741	397,522	410,316	410,210	111,843	163,364	202,999
6	4,048	431,450	365,464	378,878	399,535	400,392	109,994	160,829	194,758
7	.....	13,700	8,277	18,644	10,781	9,818	1,849	2,535	12,241
8	394	.....	.....	.....	.....	.....	.....	.....	.....
9	.77	94.36	79.22	84.26	86.98	86.95	23.70	34.63	43.03

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns—Concluded	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration	Algebra
94 Perth	160	306	446	.....	.....	.....
95 Petrolia	579	579	579	.....	.....	.....
96 Picton	440	440	440	.....	.....	.....
97 Port Colborne	255	373	674	.....	.....	.....
98 Port Hope	789	789	789	.....	.....	.....
99 Powassan	146	146	146	.....	.....	.....
100 Prescott	372	372	372	.....	.....	.....
101 Preston	832	832	832	.....	.....	.....
102 Rainy River	343	343	361	18	18	8
103 Renfrew	624	624	624	.....	.....	.....
104 Ridgetown	330	330	330	.....	.....	.....
105 Rockland	72	72	72	.....	.....	.....
106 St. Mary's	310	310	567	.....	.....	.....
107 Sandwich	373	107	373	.....	.....	.....
108 Seaforth	127	259	290	.....	.....	.....
109 Simcoe	696	767	696	64	.....	.....
110 Sioux Lookout	183	183	183	8	8	8
111 Smith's Falls	1,177	1,177	1,177	.....	.....	.....
112 Southampton	348	348	348	.....	.....	.....
113 Stayner	203	203	203	.....	.....	.....
114 Strathroy	441	441	441	102	.....	.....
115 Sturgeon Falls	102	133	204	.....	.....	.....
116 Sudbury	960	960	960	.....	.....	.....
117 Thessalon	300	407	407	.....	.....	.....
118 Thornbury	186	186	186	.....	.....	.....
119 Thorold	530	351	530	.....	.....	.....
120 Tilbury	141	141	173	.....	.....	.....
121 Tillsonburg	583	583	583	.....	.....	.....
122 Timmins	192	148	192	.....	.....	.....
123 Trenton	1,141	1,141	1,141	.....	.....	.....
124 Trout Creek	121	121	121	3	.....	.....
125 Uxbridge	205	205	205	.....	.....	.....
126 Vankleek Hill	133	133	133	.....	.....	.....
127 Walkerton	256	256	256	.....	.....	.....
128 Walkerville	774	1,071	1,071	.....	.....	.....
129 Wallaceburg	671	671	671	.....	.....	.....
130 Waterloo	798	798	798	.....	.....	.....
131 Webbwood	151	151	151	.....	.....	.....
132 Weston	438	655	655	.....	.....	.....
133 Whitby	422	422	422	.....	.....	.....
134 Wiarton	70	417	17	.....	.....	.....
135 Wingham	340	340	340	.....	.....	.....
Totals	59,516	65,168	67,734	544	126	116
Totals						
1 Rural Schools	163,827	178,305	193,617	1,286	1,482	1,348
2 Cities	148,856	157,752	162,342	1,009	1,228	618
3 Towns	59,516	65,168	67,734	544	126	116
4 Villages	19,976	22,218	22,313	213	227	215
5 Grand Totals, 1919	392,175	423,443	446,006	3,052	3,063	2,297
6 Grand Totals, 1918	377,087	414,179	429,596	3,815	3,633	2,564
7 Increases	15,088	9,264	16,410	.....	.....	.....
8 Decreases	.....	.....	.....	763	570	267
9 Percentages	83.13	89.76	94.54	.64	.64	.48

SCHOOLS—Continued

VARIOUS BRANCHES OF INSTRUCTION—Concluded

	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
94	.....	.....	.....	.....	.....	.....	.....	.....	.....
95	.....	.....	.....	.....	.....	.....	.....	579	.....
96	.....	.....	.....	.....	.....	.....	216	440	440
97	.....	.....	.....	.....	.....	.....	.....	.....	.....
98	.....	.....	.....	.....	.....	.....	.....	.....	.....
99	.....	.....	.....	.....	.....	.....	83	34	.....
100	.....	.....	.....	.....	.....	.....	.....	177	.....
101	.....	.....	.....	.....	.....	.....	92	.....	.....
102	8	18	.....	.....	18	.....	.....	.....	.....
103	.....	.....	.....	.....	.....	.....	.....	.....	.....
104	.....	.....	.....	.....	.....	.....	.....	91	.....
105	.....	.....	.....	.....	.....	.....	.....	.....	.....
106	.....	.....	.....	.....	.....	.....	149	.....	.....
107	.....	.....	.....	.....	.....	.....	.....	.....	.....
108	.....	.....	.....	.....	.....	.....	.....	.....	.....
109	.....	.....	.....	.....	.....	.....	.....	.....	.....
110	8	.....	.....	.....	8	8	113	.....	.....
111	.....	.....	.....	.....	.....	.....	170	195	.....
112	.....	.....	.....	.....	.....	.....	.....	.....	.....
113	.....	.....	.....	.....	.....	.....	28	.....	.....
114	.....	.....	.....	.....	.....	.....	.....	.....	.....
115	.....	.....	.....	.....	.....	.....	.....	.....	.....
116	.....	.....	.....	.....	.....	.....	.....	.....	.....
117	.....	.....	.....	.....	.....	.....	.....	.....	.....
118	.....	.....	.....	.....	.....	.....	.....	.....	.....
119	.....	.....	.....	.....	.....	.....	.....	395	.....
120	.....	.....	.....	.....	.....	.....	.....	.....	.....
121	.....	.....	.....	.....	.....	.....	.....	.....	.....
122	.....	.....	.....	.....	.....	.....	.....	.....	.....
123	.....	.....	.....	.....	.....	.....	.....	783	.....
124	.....	.....	.....	.....	3	.....	.....	.....	.....
125	.....	.....	.....	.....	.....	.....	.....	.....	.....
126	.....	.....	.....	.....	.....	.....	.....	.....	.....
127	.....	.....	.....	.....	.....	.....	.....	.....	.....
128	.....	.....	.....	.....	.....	.....	.....	202	185
129	.....	.....	.....	.....	.....	.....	221	.....	.....
130	.....	.....	.....	.....	.....	.....	290	47	45
131	.....	.....	.....	.....	.....	.....	.....	.....	.....
132	.....	.....	.....	.....	.....	.....	.....	.....	.....
133	.....	.....	.....	.....	.....	.....	.....	.....	.....
134	.....	.....	.....	.....	.....	.....	.....	.....	.....
135	.....	.....	.....	.....	.....	.....	.....	.....	.....
	50	78	74	.....	129	193	4,760	9,963	2,859
1	429	571	253	2,327	1,013	335	39,759	14,870	4,635
2	437	.....	.....	.....	275	1,213	6,308	88,568	62,033
3	50	78	74	.....	129	193	4,760	9,963	2,859
4	94	84	74	266	211	172	2,307	2,830	440
5	1,010	733	401	2,593	1,628	1,913	53,134	116,231	69,967
6	1,260	695	320	3,223	1,787	1,853	46,574	104,631	58,072
7	.....	38	81	.....	.....	60	6,560	11,600	11,895
8	250	.....	.....	630	159	.....	.....	.....	.....
9	.21	.15	.08	.54	.34	.40	11.26	24.63	14.83

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III. TABLE C—TEACHERS, SALARIES,

	Rural Schools	Teachers			Salaries			
		Number of Teachers	Male	Female	Highest salary, male	Highest salary, female	Average salary of male teachers	Average salary of female teachers
					$	$	$	$
1	Brant	90	5	85	1,500	1,350	1,020	754
2	Bruce	171	13	158	1,000	800	744	658
3	Carleton	156	7	149	1,400	1,000	993	681
4	Dufferin	93	11	82	800	800	731	679
5	Dundas	80	9	71	814	800	704	682
6	Elgin	119	10	109	1,150	900	815	688
7	Essex	131	17	114	1,500	1,100	933	749
8	Frontenac	147	8	139	725	800	528	525
9	Glengarry	80	2	78	750	800	692	630
10	Grey	226	25	201	1,000	875	736	646
11	Haldimand	79	6	73	700	900	690	672
12	Haliburton	59	4	55	1,000	750	700	511
13	Halton	62	.....	62	.....	1,000	.....	696
14	Hastings	194	12	182	1,200	1,000	800	665
15	Huron	199	26	173	1,250	1,000	807	672
16	Kent	141	9	132	1,000	900	806	724
17	Lambton	173	7	166	1,100	850	743	683
18	Lanark	125	7	118	650	900	568	591
19	Leeds and Grenville	233	12	221	800	775	675	609
20	Lennox and Addington	120	7	113	700	750	544	548
21	Lincoln	83	7	76	1,075	900	804	694
22	Middlesex	201	19	182	925	825	733	681
23	Norfolk	105	11	94	1,000	900	764	659
24	Northumberland and Durham	211	16	195	900	825	724	651
25	Ontario	136	14	122	1,000	850	793	677
26	Oxford	131	13	118	1,100	1,000	915	698
27	Peel	80	5	75	1,200	975	850	706
28	Perth	119	13	106	900	850	776	689
29	Peterborough	104	12	92	850	1,000	685	639
30	Prescott and Russell	97	6	91	1,000	800	758	584
31	Prince Edward	77	8	69	800	1,000	709	683
32	Renfrew	164	5	159	1,200	1,025	865	643
33	Simcoe	229	25	204	1,200	800	756	671
34	Stormont	82	6	76	800	735	722	657
35	Victoria	111	9	102	1,000	850	856	662
36	Waterloo	98	20	78	1,000	900	824	725
37	Welland	110	17	93	2,000	1,000	949	716
38	Wellington	152	13	139	1,350	800	845	671
39	Wentworth	125	13	112	1,200	1,000	925	721
40	York	327	40	287	1,900	1,400	1,040	756
41	Algoma	80	.....	80	.....	1,000	.....	643
42	Kenora	20	5	15	1,000	850	795	689
43	Manitoulin	51	9	42	1,000	750	692	575
44	Muskoka	108	6	102	750	922	658	493
45	Nipissing	50	5	45	1,000	800	672	563
46	Parry Sound	131	17	114	1,200	1,035	700	559
47	Rainy River	47	4	43	1,000	1,000	687	644
48	Sudbury	79	9	70	1,700	1,500	983	676
49	Timiskaming, etc	99	13	86	2,200	1,750	1,123	808
50	Thunder Bay	69	11	58	1,600	1,200	818	716
1	Totals, Rural Schools	6,154	548	5,606	2,200	1,750	807	663
2	" Cities	3,703	465	3,238	2,800	2,500	2,024	1,130
3	" Towns	1,429	143	1,286	2,500	1,550	1,372	749
4	" Villages	517	77	440	2,100	1,050	1,064	671
5	Grand Totals, 1919	11,803	1,233	10,570	2,800	2,500	1,348	817
6	Grand Totals, 1918	11,419	984	10,435	2,800	2,500	1,226	707
7	Increases	384	249	135	.....	.....	122	110
8	Decreases	.....	.....	.....	.....	.....	.....	.....
9	Percentages	.....	10.44	89.55	.....	.....	.....	.....

SCHOOLS—Continued
CERTIFICATES, EXPERIENCE, ETC.

Salaries—Continued

	Average salary, male teachers with I Class certificates	Average salary, female teachers with I Class certificates	Average salary, male teachers with II Class certificates	Average salary, female teachers with II Class certificates	Average salary, male teachers with III or District certificates	Average salary, female teachers with III or District certificates	Average salary Kindergarten-Primary teachers
	$	$	$	$	$	$	$
1	.....	760	1,100	752	700	.....	850
2	850	718	735	675	.....	597	.....
3	850	750	1,017	699	.....	591	.....
4	756	725	727	682	.....	641	.....
5	.....	696	723	689	700	625	.....
6	800	709	817	689	.....	633	550
7	825	785	1,013	753	815	687	.....
8	.....	667	712	652	487	510	.....
9	.....	700	692	658	.....	591	.....
10	650	698	752	667	632	583	.....
11	.....	714	688	672	700	612	.....
12	.....	.....	875	683	525	522	.....
13	.....	650	.....	697	.....	.....	.....
14	900	792	870	727	725	600	.....
15	750	766	826	673	550	609	.....
16	900	744	779	724	.....	667	.....
17	675	742	770	680	.....	665	.....
18	650	668	.....	650	575	547	.....
19	650	636	725	647	650	559	.....
20	.....	594	675	650	430	512	.....
21	.....	725	804	695	.....	617	.....
22	725	732	733	679	.....	.....	.....
23	.....	600	775	669	650	614	.....
24	640	699	736	661	.....	598	.....
25	700	723	812	685	650	613	.....
26	1,025	720	895	697	.....	.....	.....
27	.....	756	850	708	.....	608	.....
28	825	750	779	690	650	600	.....
29	.....	717	746	667	650	612	.....
30	800	750	800	651	.....	576	.....
31	.....	817	754	710	633	608	.....
32	.....	825	906	687	.....	601	.....
33	700	682	768	682	733	616	.....
34	.....	640	747	667	600	629	.....
35	900	662	850	689	.....	617	.....
36	1,000	750	814	727	.....	625	.....
37	650	711	989	717	.....	700	.....
38	1,075	708	804	672	.....	628	.....
39	900	790	930	710	.....	.....	700
40	1,137	727	1,030	760	.....	600	.....
41	.....	800	.....	740	.....	618	.....
42	.....	.....	908	775	625	699	.....
43	1,000	750	800	658	650	585	.....
44	700	.....	750	615	625	503	.....
45	.....	.....	850	722	480	560	.....
46	900	1,000	962	704	575	558	.....
47	.....	1,000	800	758	.....	627	.....
48	1,700	1,283	1,060	762	800	583	.....
49	1,740	1,337	1,141	858	800	722	.....
50	.....	.....	767	845	875	700	.....
1	872	740	846	696	664	587	737
2	2,219	1,065	1,660	1,149	.....	945	836
3	1,511	763	1,341	748	.....	708	748
4	1,196	724	1,050	673	.....	562	750
5	1,960	898	1,101	844	664	592	812
6	1,782	775	1,041	732	595	537	707
7	178	123	60	112	69	55	105
8	.....	.....	.....	.....	.....	.....	.....
9	.....	.....	.....	.....	.....	.....	.....

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III. TABLE C—TEACHERS, SALARIES,

Rural Schools—Continued	Salaries—Continued				
	Average salary Kindergarten teachers	Average salary Manual Training teachers	Average salary Household Science teachers	Average salary, male teachers with Temporary certificates	Average salary, female teachers with Temporary certificates
	$	$	$	$	$
1 Brant	.....	.....	.....	.....	600
2 Bruce	.....	.....	.....	.....	571
3 Carleton	.....	.....	.....	.....	575
4 Dufferin	.....	.....	.....	650	675
5 Dundas	.....	.....	.....	600	625
6 Elgin	.....	.....	.....	.....	.....
7 Essex	.....	.....	.....	.....	600
8 Frontenac	.....	.....	.....	456	437
9 Glengarry	.....	.....	.....	.....	550
10 Grey	.....	.....	.....	700	525
11 Haldimand	.....	.....	.....	.....	.....
12 Haliburton	.....	.....	.....	.....	480
13 Halton	.....	.....	.....	.....	.....
14 Hastings	.....	.....	.....	550	554
15 Huron	.....	.....	.....	.....	650
16 Kent	.....	.....	.....	.....	.....
17 Lambton	.....	.....	.....	.....	750
18 Lanark	.....	.....	.....	512	510
19 Leeds and Grenville	.....	.....	.....	575	531
20 Lennox and Addington	.....	.....	.....	506	468
21 Lincoln	.....	.....	.....	.....	.....
22 Middlesex	.....	.....	.....	.....	.....
23 Norfolk	.....	.....	.....	.....	660
24 Northumberland & Durham	.....	.....	.....	.....	582
25 Ontario	.....	.....	.....	.....	400
26 Oxford	.....	.....	.....	.....	575
27 Peel	.....	.....	.....	.....	.....
28 Perth	.....	.....	.....	.....	.....
29 Peterborough	.....	.....	.....	525	542
30 Prescott and Russell	.....	.....	.....	675	496
31 Prince Edward	.....	.....	.....	.....	600
32 Renfrew	.....	.....	.....	700	590
33 Simcoe	.....	.....	.....	700	595
34 Stormont	.....	.....	.....	.....	600
35 Victoria	.....	.....	.....	.....	536
36 Waterloo	.....	.....	.....	.....	.....
37 Welland	.....	.....	.....	.....	.....
38 Wellington	.....	.....	.....	.....	600
39 Wentworth	800	.....	.....	.....	.....
40 York	.....	.....	.....	.....	650
41 Algoma	.....	.....	.....	.....	549
42 Kenora	.....	.....	.....	.....	625
43 Manitoulin	.....	.....	.....	595	505
44 Muskoka	.....	.....	.....	625	433
45 Nipissing	.....	.....	.....	700	491
46 Parry Sound	.....	.....	.....	560	504
47 Rainy River	.....	.....	.....	575	591
48 Sudbury	.....	.....	.....	525	579
49 Timiskaming, etc	.....	.....	.....	650	608
50 Thunder Bay	.....	.....	.....	725	586
1 Totals, Rural Schools	809	.....	.....	579	518
2 " Cities	1,117	1,915	1,251	.....	1,300
3 " Towns	717	1,400	900	1,050	800
4 " Villages	.....	.....	.....	.....	450
5 Grand Totals, 1919	1,101	1,904	1,246	590	522
6 Grand Totals, 1918	817	1,673	958	555	466
7 Increases	284	331	288	35	56
8 Decreases	.....	.....	.....	.....	.....
9 Percentages	.....	.....	.....	.....	.....

SCHOOLS—Continued

CERTIFICATES, EXPERIENCE, ETC.—Continued

	Number who have ever attended a Model School in Ontario	Number who have ever attended a Normal School in Ontario	Number who have ever attended the Normal College or F. of E. in Ontario	Number of University Graduates	Certificates								
					1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class	District	Kinder-garten-Primary	Kinder-garten	Manual Training	Household Science	Temporary
1	12	77	12	.....	12	74	1	.....	2	....	....	....	1
2	34	120	10	.....	11	124	20	4	.....	....	....	....	12
3	11	137	3	.....	3	129	15	1	.....	....	....	....	8
4	3	83	6	.....	6	77	8	.....	.....	....	....	....	2
5	4	67	7	.....	7	62	6	.....	.....	....	....	....	5
6	13	108	9	.....	9	106	3	.....	1	....	....	....	.....
7	13	105	14	.....	14	102	13	.....	.....	....	....	....	2
8	74	38	3	1	3	35	31	32	.....	....	....	....	46
9	25	49	2	1	2	46	28	1	.....	....	....	....	3
10	29	183	9	.....	8	170	34	.....	.....	....	....	....	14
11	7	67	9	.....	9	63	7	.....	.....	....	....	....	.....
12	28	5	.....	.....	.....	5	12	16	.....	....	....	....	26
13	8	60	2	.....	1	61	.....	.....	.....	....	....	....	.....
14	66	99	9	.....	9	97	52	13	.....	....	....	....	23
15	11	188	7	.....	7	181	9	.....	.....	....	....	....	2
16	7	127	11	.....	11	127	3	.....	.....	....	....	....	.....
17	11	158	11	.....	11	156	5	.....	.....	....	....	....	1
18	36	57	7	.....	6	55	26	7	.....	....	....	....	31
19	73	137	12	1	10	129	71	2	.....	....	....	....	21
20	34	44	4	.....	4	40	20	19	.....	....	....	....	37
21	15	74	5	.....	4	76	3	.....	.....	....	....	....	.....
22	11	195	7	.....	7	194	.....	.....	.....	....	....	....	.....
23	24	96	1	.....	1	87	15	1	.....	....	....	....	1
24	28	175	14	.....	15	158	30	1	.....	....	....	....	7
25	16	112	14	.....	13	105	15	1	.....	....	....	....	1
26	12	117	12	.....	12	118	.....	.....	.....	....	....	....	1
27	3	74	4	.....	4	73	3	.....	.....	....	....	....	.....
28	8	112	6	.....	6	108	5	.....	.....	....	....	....	.....
29	28	65	3	.....	3	61	17	9	.....	....	....	....	14
30	36	46	5	.....	4	40	18	1	.....	....	....	....	34
31	17	55	4	.....	3	50	22	.....	.....	....	....	....	2
32	70	86	2	.....	2	79	49	18	.....	....	....	....	16
33	31	183	17	1	16	176	31	.....	.....	....	....	....	6
34	27	70	4	.....	5	61	15	.....	.....	....	....	....	1
35	17	85	3	1	3	82	14	1	.....	....	....	....	11
36	16	92	5	.....	5	91	2	.....	.....	....	....	....	.....
37	12	98	12	.....	11	98	1	.....	.....	....	....	....	.....
38	12	132	14	.....	11	130	9	.....	.....	....	....	....	2
39	3	108	17	1	17	106	.....	.....	1	1	....	....	.....
40	58	298	28	.....	26	297	3	.....	.....	....	....	....	1
41	38	25	1	.....	1	24	25	14	.....	....	....	....	16
42	12	5	.....	.....	.....	5	8	3	.....	....	....	....	4
43	28	6	2	.....	2	5	19	10	.....	....	....	....	15
44	62	14	.....	.....	1	13	32	26	.....	....	....	....	36
45	22	10	.....	.....	.....	10	14	8	.....	....	....	....	18
46	51	19	3	.....	3	18	38	24	.....	....	....	....	48
47	26	8	1	.....	1	8	6	18	.....	....	....	....	14
48	34	28	4	.....	4	30	22	8	.....	....	....	....	15
49	28	62	5	1	5	57	17	6	.....	....	....	....	14
50	36	19	.....	.....	.....	18	24	14	.....	....	....	....	13
1	1,280	4,378	340	7	328	4,218	821	258	4	1	....	....	524
2	1,536	2,851	634	93	668	2,546	11	.....	87	271	47	72	1
3	434	1,248	140	7	142	1,220	21	2	26	11	1	1	5
4	109	455	42	1	39	457	17	.....	1	....	....	....	3
5	3,359	8,932	1,156	108	1,177	8,441	870	260	118	283	48	73	533
6	3,595	8,862	1,001	119	1,029	8,305	983	234	88	283	37	46	414
7	.....	70	155	.....	148	136	.....	26	30	....	11	27	119
8	236	.....	.....	11	.....	.....	113	.....	.....	....	....	....	.....
9	28.45	75.67	9.79	.91	9.97	71.51	7.37	2.20	1.00	2.40	.40	.62	4.51

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III. TABLE C—TEACHERS, SALARIES,

Experience

—	Number of teachers who at end of year had taught less than one year		One year, but less than two years		2 years, but less than 3 years		3 years, but less than 4		4 years, but less than 5		5 years, but less than 6	
Totals	Male	Female	M.	F.	M.	F.	M.	F	M.	F.	M.	F.
1 Rural Schools	103	1,276	64	1,191	59	692	46	560	27	383	20	318
2 Cities	3	71	8	114	27	190	14	159	21	208	21	226
3 Towns	3	64	5	120	3	94	2	115	5	101	4	93
4 Villages	2	38	3	45	6	37	4	46	4	38	3	31
5 Grand Totals, 1919	111	1,449	80	1,470	95	1,013	66	880	57	730	48	668
6 Percentages, Males	9.00	.....	6.48	.....	7.70	.....	5.35	....	4.62	....	3.89	....
7 Percentages, Females	.....	13.70	.....	13.90	.....	9.58	....	8.32	....	6.90	....	6.31

—	13 years, but less than 14		14 years, but less than 15		15 years, but less than 16		16 years, but less than 17		17 years, but less than 18		18 years, but less than 19	
Totals	Male	Female	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Rural Schools	5	26	9	36	6	39	7	20	3	21	9	26
2 Cities	17	99	13	79	11	83	10	75	9	86	16	82
3 Towns	6	26	3	21	3	25	2	19	1	16	2	13
4 Villages	1	7	1	8	1	7	....	10	....	8	1	5
5 Grand Totals, 1919	29	158	26	144	21	154	19	124	13	131	28	126
6 Percentages, Males	2.35	.....	2.10	.....	1.70	.....	1.54	....	1.05	....	2.27	....
7 Percentages, Females	.....	1.49	.....	1.36	.....	1.45	....	1.17	....	1.23	....	1.19

—	26 years, but less than 27		27 years, but less than 28		28 years, but less than 29		29 years, but less than 30		30 years, but less than 31		31 years, but less than 32	
Totals	Male	Female	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Rural Schools	8	14	4	11	6	12	8	9	9	9	3	3
2 Cities	10	48	10	35	7	35	15	34	9	24	5	34
3 Towns	2	10	4	8	3	7	5	10	3	14	3	9
4 Villages	1	2	.....	1	1	3	2	1	3	1	1	1
5 Grand Totals, 1919	21	74	18	55	17	57	30	54	24	48	12	47
6 Percentages, Males	1.70	.....	1.46	.....	1.37	.....	2.43	....	1.94	....	.97	....
7 Percentages, Females	.....	.70	.....	.52	.....	.53	....	.51	....	.45	....	.44

Average experience; male teachers, 14.3 years; female teachers, 7.9 years; all teachers, 8.5 years.

SCHOOLS—Continued

CERTIFICATES, EXPERIENCE, ETC.—Concluded

Experience—Continued

	6 years, but less than 7		7 years, but less than 8		8 years, but less than 9		9 years, but less than 10		10 years, but less than 11		11 years, but less than 12		12 years, but less than 13	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	12	231	14	173	12	128	7	82	10	100	3	46	7	51
2	25	168	16	150	20	140	13	143	11	152	11	117	12	117
3	6	86	3	68	4	52	3	49	1	51	3	24	4	31
4	2	25	5	20	5	10	3	9	1	22	.....	12	2	5
5	45	510	38	411	41	330	26	283	23	325	17	199	25	204
6	3.64	.....	3.08	.....	3.32	.....	2.10	.....	1.86	.....	1.37	.....	2.02	.....
7	.....	4.82	.....	3.88	.....	3.12	.....	2.67	.....	3.07	.....	1.88	.....	1.93

	19 years, but less than 20		20 years, but less than 21		21 years, but less than 22		22 years, but less than 23		23 years, but less than 24		24 years, but less than 25		25 years, but less than 26	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	4	14	8	26	6	20	3	11	9	12	8	16	8	15
2	13	58	9	64	9	55	8	55	15	42	10	25	15	34
3	3	21	7	17	8	19	4	17	.....	11	4	6	8	14
4	1	3	1	9	3	4	.....	4	1	7	1	4	2	2
5	21	96	25	116	26	98	15	87	25	72	23	51	33	65
6	1.70	.....	2.02	.....	2.10	.....	1.21	.....	2.02	.....	1.86	.....	2.67	.....
7	.....	.90	.....	1.09	.....	.92	.....	.82	.....	.68	.....	.48	.....	.61

	32 years, but less than 33		33 years, but less than 34		34 years, but less than 35		35 years, but less than 36		36 years, but less than 37		37 years, but less than 38		38 years, but less than 39		39 years, but less than 40		40 years or over	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	5	5	4	6	.....	2	10	5	3	3	4	3	4	2	2	4	9	5
2	10	36	4	34	5	45	4	24	5	27	2	18	3	14	3	6	16	32
3	5	5	1	4	3	8	3	8	3	4	2	4	2	5	1	5	6	12
4	1	1	2	.....	.....	4	1	1	1	2	3	....	4	1	1	5	3	1
5	21	47	11	44	8	59	18	38	12	36	11	25	13	22	7	20	34	50
6	1.70	.....	.89	.....	.64	....	1.46	....	.97	....	.89	....	1.05	....	.56	....	2.75	....
7	.....	.44	.....	.41	.....	.55	....	.35	....	.34	....	.23	....	.20	....	.18	....	.47

THE PUBLIC

IV. TABLE D—SCHOOL

Rural Schools	School Houses						School Visits				
	Number of Schools	Brick	Stone	Concrete	Frame	Log	By Inspectors	By Trustees	By Clergymen	By other persons	Total
1 Brant	62	49	2	1	10	.....	162	84	23	285	554
2 Bruce	166	113	17	2	34	.....	331	75	29	117	552
3 Carleton	123	38	17	7	60	1	250	49	32	97	428
4 Dufferin	92	63	4	2	23	.....	184	71	36	104	395
5 Dundas	75	7	9	1	58	.....	181	40	15	61	297
6 Elgin	105	83	.....	2	20	.....	278	112	25	243	658
7 Essex	112	48	3	6	55	.....	253	112	13	79	457
8 Frontenac	144	13	20	....	108	3	329	80	37	85	531
9 Glengarry	74	4	.....	3	66	1	191	50	27	21	289
10 Grey	221	129	51	2	39	.....	451	108	40	208	807
11 Haldimand	74	63	.....	2	9	.....	164	93	17	193	467
12 Haliburton	56	.....	3	....	52	1	110	35	55	173	373
13 Halton	58	33	11	6	8	.....	125	89	19	87	320
14 Hastings	178	61	14	3	100	.....	402	167	40	1,075	1,684
15 Huron	184	121	8	2	53	.....	384	181	48	282	895
16 Kent	132	98	.....	1	33	.....	295	102	42	204	643
17 Lambton	168	95	1	3	69	.....	338	58	42	155	593
18 Lanark	122	22	11	....	88	1	267	171	38	738	1,274
19 Leeds & Grenville	222	61	74	3	81	3	480	69	22	175	746
20 Lennox and Addington	112	22	7	4	79	.....	240	71	46	53	410
21 Lincoln	67	35	8	1	23	.....	148	83	27	187	445
22 Middlesex	184	143	.....	1	40	.....	398	93	48	155	694
23 Norfolk	99	70	6	6	17	.....	232	71	15	159	477
24 Northumberland & Durham	202	139	11	4	48	.....	440	170	84	349	1,043
25 Ontario	120	80	1	1	37	1	269	60	60	57	446
26 Oxford	107	91	4	....	12	.....	294	109	29	153	585
27 Peel	74	55	5	3	11	.....	172	96	22	97	387
28 Perth	112	91	5	....	16	.....	317	141	41	308	807
29 Peterborough	98	48	3	3	39	5	223	43	49	152	467
30 Prescott and Russell	83	10	.....	1	64	8	172	55	19	75	321

SCHOOLS—Continued

HOUSES, PRAYERS, ETC.

	Maps and Globes		Examinations, Prizes		Medical Inspection								
	Number of Maps	Number of Globes	Number of Schools holding Public Examinations	Number of Schools distributing Prizes or Merit Cards	Number of Schools with Medical Inspection	Number of Schools with Nurse Inspection only	Number of Nurses employed	Number of Trees planted on Arbor Day	Number of Schools using authorized Scripture Readings	Number of Schools using the Bible	Number of Schools in which passages are memorized	Number of Schools opened and closed with Prayer	No. of Schools where Religious Instruction is given by Clergymen or their representatives
1	859	78	20	11	.....	.....	.....	2	40	50	23	62	.....
2	2,195	183	67	6	15	.....	.....	38	87	82	89	166	.....
3	1,560	134	30	18	.....	.....	.....	64	56	91	7	117	.....
4	1,031	99	8	9	.....	.....	.....	10	51	87	25	92	69
5	1,054	97	6	2	.....	.....	.....	1	40	63	.....	75	.....
6	1,344	131	29	27	.....	.....	.....	72	50	80	25	102	12
7	1,433	126	18	8	1	.....	.....	10	82	94	97	112	7
8	1,525	170	29	43	.....	.....	.....	54	52	111	49	139	4
9	1,098	90	18	14	1	.....	.....	112	25	22	8	71	5
10	2,718	237	34	17	15	.....	.....	149	75	199	42	219	12
11	840	76	35	18	44	.....	.....	72	32	58	14	74	3
12	441	54	2	2	.....	.....	.....	12	37	47	20	56	1
13	735	67	22	11	.....	.....	.....	17	11	48	9	58	.....
14	2,266	194	62	28	1	.....	.....	75	83	146	44	174	8
15	2,224	210	68	39	1	.....	.....	70	113	152	61	182	.....
16	1,595	144	134	6	.....	4	.....	39	68	106	36	132	.....
17	2,065	173	45	46	.....	.....	.....	59	49	132	45	165	.....
18	1,291	131	22	17	.....	.....	.....	52	67	92	37	122	2
19	2,860	233	25	13	.....	.....	.....	63	100	131	28	220	.....
20	1,172	126	12	15	.....	.....	.....	13	35	80	14	111	3
21	808	90	22	14	4	.....	.....	27	25	40	30	65	.....
22	2,466	235	74	57	8	.....	.....	85	60	156	88	184	.....
23	1,014	107	28	29	.....	.....	.....	99	41	66	30	99	1
24	2,444	234	89	43	3	1	2	33	120	169	46	195	9
25	1,506	128	22	10	.....	.....	.....	48	28	100	5	119	.....
26	1,453	129	28	8	.....	.....	.....	9	65	87	34	106	3
27	975	81	21	13	.....	.....	.....	61	15	57	15	74	.....
28	1,364	126	72	14	28	.....	.....	12	95	90	29	101	20
29	950	112	16	19	.....	.....	.....	18	47	68	21	98	13
30	1,128	91	19	5	3	.....	.....	59	6	39	2	80	2

THE PUBLIC

IV. TABLE D—SCHOOL

Rural Schools	School Houses						School Visits				
	Number of Schools	Brick	Stone	Concrete	Frame	Log	By Inspectors	By Trustees	By Clergymen	By other persons	Total
31 Prince Edward ...	76	35	10	2	29	.....	195	54	30	116	395
32 Renfrew....	153	49	1	7	85	11	357	109	50	104	600
33 Simcoe	207	144	2	14	47	.....	440	139	98	66	743
34 Stormont.....	75	3	.....	2	69	1	200	28	15	46	289
35 Victoria	103	74	4	....	25	.....	282	70	67	161	580
36 Waterloo	82	61	16	....	5	.....	227	155	18	290	690
37 Welland.....	79	50	5	5	19	.....	237	82	28	242	589
38 Wellington	142	94	37	5	6	.....	327	145	26	129	627
39 Wentworth	78	56	13	1	8	.....	171	115	18	274	578
40 York.....	172	133	1	2	36	.....	351	250	87	194	882
41 Algoma	74	9	1	2	57	5	159	76	22	125	382
42 Kenora.....	21	1	.....	....	17	3	33	18	3	15	69
43 Manitoulin	49	2	2	11	30	4	101	16	14	57	188
44 Muskoka	105	26	2	1	68	8	207	48	42	146	443
45 Nipissing.....	53	4	.....	....	41	8	89	78	39	64	270
46 Parry Sound.....	120	12	3	4	85	16	246	88	36	139	509
47 Rainy River.....	47	1	.....	1	34	11	90	44	12	155	301
48 Sudbury.....	63	4	.....	....	56	3	98	54	53	76	281
49 Timiskaming, etc..	84	5	.....	....	70	9	99	84	44	68	295
50 Thunder Bay.....	64	5	.....	....	50	9	117	126	4	101	348
Totals											
1 Rural Schools	5,473	2,653	392	127	2,189	112	12,086	4,517	1,806	8,695	27,104
2 Cities	303	271	18	3	11	.....	6,080	2,523	354	15,557	24,514
3 Towns	245	183	22	7	33	.....	2,301	1,023	294	3,004	6,622
4 Villages.....	158	135	10	4	9	.....	757	477	184	500	1,918
5 Grand Totals, 1919.	6,179	3,242	442	141	2,242	112	21,224	8,540	2,638	27,756	60,158
6 Grand Totals, 1918.	6,136	3,233	439	132	2,220	112	19,648	7,115	2,371	21,476	50,610
7 Increases.....	43	9	3	9	22	.....	1,576	1,425	267	6,280	9,548
8 Decreases.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
9 Percentages	.....	52.46	7.15	2.28	36.28	1.81	35.28	14.19	4.38	46.13	.....

SCHOOLS—Continued

HOUSES, PRAYERS, ETC.—Concluded

	Maps and Globes		Examinations, Prizes		Medical Inspection			Number of Trees planted on Arbor Day	Number of Schools using authorized Scripture Readings	Number of Schools using the Bible	Number of Schools in which passages are memorized	Number of Schools opened and closed with Prayer	No. of Schools where Religious Instruction is given by Clergymen or their representatives
	Number of Maps	Number of Globes	Number of Schools holding Public Examinations	Number of Schools distributing Prizes or Merit Cards	Number of Schools with Medical Inspection	Number of Schools with Nurse Inspection only	Number of Nurses employed						
31	978	77	22	.....	.....	11	.....	.....	70	54	56	73	2
32	1,745	181	16	37	.....	.....	.....	62	47	63	30	152	4
33	2,619	221	55	32	34	12	.....	89	65	174	46	206	46
34	991	85	14	1	.....	.....	.....	58	38	48	11	75	3
35	1,201	117	2	.....	.....	.....	.....	.....	18	89	8	103	15
36	1,077	98	32	10	.....	.....	.....	26	45	53	27	82	1
37	758	94	25	26	.....	.....	.....	23	32	69	16	79	.....
38	1,686	148	45	32	2	.....	.....	75	72	108	43	142	.....
39	787	440	39	12	66	.....	.....	81	38	65	15	76	.....
40	2,006	199	72	29	1	3	1	118	104	137	45	169	1
41	757	73	9	7	1	.....	.....	12	60	56	34	73	3
42	98	18	6	4	3	.....	.....	3	2	19	3	21	.....
43	501	50	15	6	.....	.....	.....	26	30	41	7	49	9
44	975	111	12	16	.....	.....	.....	88	45	84	5	105	6
45	316	48	11	9	.....	.....	.....	24	8	29	14	51	2
46	1,379	128	11	8	2	.....	.....	51	102	108	3	120	1
47	226	41	4	8	.....	.....	.....	66	14	39	5	46	1
48	439	64	16	1	1	.....	.....	21	1	34	2	62	1
49	738	84	33	22	4	.....	.....	58	25	67	12	76	7
50	344	51	20	11	.....	.....	.....	45	3	46	5	63	.....
1	64,035	6,414	1,536	833	238	31	3	2,361	2,474	4,126	1,360	5,393	276
2	5,960	499	122	87	125	147	98	786	65	249	186	263	10
3	3,658	399	89	31	22	53	20	381	96	194	74	224	13
4	2,140	229	36	22	17	8	3	55	71	125	36	153	9
5	75,793	7,541	1,783	973	402	239	124	3,583	2,706	4,694	1,656	6,033	308
6	76,173	7,542	1,493	802	188	223	119	2,266	2,838	4,584	1,741	5,960	348
7	.....	.....	290	171	214	16	5	1,317	.....	110	.....	73	.....
8	380	1	.....	.....	.....	.....	.....	.....	132	.....	85	.....	40
9	†12.26	†1.22	28.85	15.74	6.50	3.86	.....	.....	43.79	75.96	26.80	97.63	4.98

†To each school.

THE PUBLIC

V. TABLE E—FINANCIAL

Rural Schools	Receipts				
	Legislative Grants	Municipal Grants	Assessments levied on requisition of the Trustees	Debentures	Clergy Reserve Fund, balances and other sources	Total receipts for all Public School purposes
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1 Brant	10,204 58	24,795 98	57,717 16	532 36	59,105 63	152,355 71
2 Bruce	21,438 99	55,625 27	81,173 88	4,513 99	94,524 35	257,276 48
3 Carleton	20,021 41	42,046 29	81,042 63	24,441 92	57,431 82	224,984 07
4 Dufferin	11,891 91	27,800 00	49,739 62	.....	43,435 19	132,866 72
5 Dundas	14,581 37	24,752 73	36,917 26	7,300 00	34,891 11	118,442 47
6 Elgin	12,954 97	34,243 34	76,052 64	12,469 23	87,476 23	223,196 41
7 Essex	14,838 14	36,567 00	101,589 88	6,622 37	88,657 58	248,274 97
8 Frontenac	30,284 16	36,542 92	39,542 28	131 74	58,552 24	165,053 34
9 Glengarry	12,306 01	22,794 00	29,068 46	483 86	16,723 07	81,375 40
10 Grey	26,250 29	70,117 93	107,287 39	3,992 65	97,345 64	304,993 90
11 Haldimand	8,530 57	24,592 09	39,755 98	4,186 48	54,534 50	131,599 62
12 Haliburton	15,871 30	12,933 43	8,812 01	.....	12,288 98	49,905 72
13 Halton	6,106 45	18,835 43	33,483 19	.....	34,323 90	92,748 97
14 Hastings	41,678 08	53,876 83	72,939 85	1,767 40	115,493 64	285,755 80
15 Huron	19,084 97	62,054 80	107,098 34	3,775 00	108,296 18	300,309 29
16 Kent	17,418 12	42,560 78	90,657 45	9,000 00	121,877 24	281,513 59
17 Lambton	17,376 10	54,694 95	94,278 95	2,000 00	69,921 28	238,271 28
18 Lanark	17,712 63	37,323 12	37,030 71	4,940 10	38,058 75	135,065 31
19 Leeds & Grenville	39,184 24	71,400 92	80,149 28	5,424 00	105,973 52	302,131 96
20 Lennox and Addington	18,424 82	33,579 23	33,032 61	2,346 02	45,152 59	132,535 27
21 Lincoln	10,142 40	24,131 71	64,197 94	14,951 40	65,663 67	179,087 12
22 Middlesex	19,689 56	60,688 67	111,193 16	1,626 76	105,037 11	298,235 26
23 Norfolk	12,732 94	32,165 47	52,147 01	6,000 00	71,990 64	175,036 06
24 Northumberland & Durham	27,015 46	64,135 91	96,905 50	692 00	76,327 82	265,076 69
25 Ontario	15,258 28	40,252 77	75,249 07	25,247 52	55,681 15	211,688 79
26 Oxford	14,813 56	38,440 45	86,769 95	.....	96,693 01	236,716 97
27 Peel	8,599 91	24,149 29	48,927 50	.....	46,241 44	127,918 14
28 Perth	12,044 98	36,179 94	69,829 79	2,486 22	62,897 08	183,438 01
29 Peterborough	23,380 38	25,336 70	38,029 39	1,200 00	39,523 83	127,470 30
30 Prescott and Russell	12,440 23	29,816 19	35,099 64	2,422 89	42,782 82	122,561 77
31 Prince Edward	8,994 54	23,544 37	35,531 01	.....	28,346 51	96,416 43
32 Renfrew	33,196 91	45,198 03	54,659 98	2,479 75	74,259 42	209,794 09
33 Simcoe	26,041 72	69,216 76	118,735 88	4,586 85	124,357 78	342,938 99
34 Stormont	13,892 60	24,751 82	28,921 89	650 00	29,562 45	97,778 76
35 Victoria	17,644 71	31,381 41	49,725 59	.....	36,759 19	135,510 90
36 Waterloo	10,607 54	28,998 99	63,339 90	22,856 02	85,368 64	211,171 09
37 Welland	14,490 34	45,976 70	68,415 06	35,178 00	77,867 07	241,927 17
38 Wellington	15,666 81	45,963 16	80,471 12	5,152 45	95,196 26	242,449 80
39 Wentworth	18,254 79	34,884 46	98,611 27	86,442 89	108,707 03	346,900 44
40 York	46,378 78	91,422 03	250,440 08	78,053 33	279,209 60	745,503 82
41 Algoma	28,567 55	5,915 00	44,938 95	15,696 35	24,213 80	119,331 65
42 Kenora	7,343 24	1,051 50	9,098 84	12 67	6,175 49	23,681 74
43 Manitoulin	17,350 99	6,155 00	18,515 82	590 00	11,390 84	54,002 65
44 Muskoka	27,347 89	16,549 22	20,195 25	225 00	25,424 84	89,742 20
45 Nipissing	14,970 54	1,285 00	23,248 41	153 70	8,409 80	48,067 45
46 Parry Sound	38,603 27	10,397 50	41,136 72	2,870 50	23,792 56	116,800 55
47 Rainy River	13,546 18	4,995 66	19,686 58	3,071 80	7,499 03	48,799 25
48 Sudbury	25,797 49	3,437 90	46,651 71	2,478 46	59,652 93	138,018 49
49 Timiskaming, etc.	35,325 16	7,155 00	68,925 94	3,142 91	28,823 75	143,372 76
50 Thunder Bay	21,549 47	13,550 00	31,831 34	4,561 00	15,148 26	86,640 07
Totals	967,847 33	1,674,263 65	3,108,799 86	416,755 59	3,157,067 26	9,324,733 69

SCHOOLS—Continued

STATEMENT

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus, prizes and school books	Rent and repairs, fuel and other expenses	Total expenditure for all Public School purposes		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
1	64,239 34	6,579 06	1,079 63	31,876 20	103,774 23	366,659	14,535
2	107,519 13	14,319 46	8,977 41	54,748 21	185,564 21	264,740	25,728
3	102,849 43	25,643 71	1,241 07	42,317 17	172,051 38	447,734	18,268
4	59,651 83	3,895 92	685 90	18,778 93	83,012 58	146,392	24,075
5	53,197 07	18,167 57	704 89	14,680 07	86,749 60	117,450	14,570
6	81,045 70	5,991 07	2,375 72	46,421 57	135,834 06	291,744	24,917
7	94,349 35	33,828 61	2,499 35	48,553 26	179,230 57	412,807	22,174
8	73,168 25	4,521 19	1,281 02	20,061 65	99,032 11	173,389	17,738
9	46,854 40	898 24	1,009 39	13,715 04	62,477 07	118,641	10,882
10	143,153 23	4,100 71	1,527 44	57,849 34	206,630 72	404,254	29,430
11	50,642 41	7,979 28	903 53	18,920 17	78,445 39	187,184	11,587
12	27,089 96	985 33	662 84	5,753 90	34,492 03	50,100	6,390
13	40,946 66	4,076 75	889 21	16,426 48	62,339 10	151,550	9,750
14	121,698 30	9,301 82	1,684 00	59,614 91	172,299 03	309,515	28,162
15	129,389 07	13,455 29	1,497 35	59,896 99	204,238 70	350,700	28,421
16	97,734 80	11,848 52	2,265 78	49,086 09	160,935 19	527,300	23,595
17	117,078 94	6,783 12	1,677 66	38,332 22	163,871 94	308,950	25,122
18	69,486 03	7,457 33	628 00	17,121 35	94,692 71	169,398	22,862
19	136,053 63	15,076 29	1,763 00	40,653 69	193,546 61	338,275	33,142
20	63,242 24	3,391 03	500 93	17,808 60	84,942 80	130,826	11,539
21	55,601 39	19,056 82	1,505 55	34,976 69	111,140 45	377,385	18,597
22	132,336 29	11,090 10	1,618 06	53,770 28	198,814 73	465,846	27,822
23	66,950 94	6,522 99	854 24	22,955 16	97,283 33	249,790	15,696
24	134,904 41	6,835 46	1,968 81	37,402 72	181,111 40	387,952	25,816
25	88,348 30	30,818 03	1,138 18	34,947 70	155,252 21	258,871	21,059
26	90,494 57	8,261 31	1,055 18	40,949 25	140,760 31	348,253	17,400
27	54,733 02	4,410 40	374 76	24,228 95	83,747 13	200,595	13,665
28	79,970 35	4,239 77	1,456 60	33,187 81	118,854 53	243,050	22,190
29	61,135 41	5,654 45	1,276 68	15,110 43	83,176 97	134,895	6,848
30	54,737 31	1,804 13	716 89	16,313 51	73,571 84	153,843	9,953
31	48,417 26	2,680 89	463 92	12,809 55	64,371 62	113,550	16,400
32	97,310 18	10,896 82	1,893 22	28,780 05	138,790 27	124,875	52,352
33	150,074 63	14,027 60	2,252 47	50,250 11	216,604 81	428,010	32,367
34	51,298 36	3,420 39	234 29	13,989 59	68,942 63	128,375	11,627
35	70,571 83	3,707 08	1,167 22	24,408 83	99,854 96	184,071	15,476
36	68,866 20	17,792 55	1,098 76	35,627 57	123,385 08	228,500	11,680
37	75,285 53	51,731 97	1,162 95	25,119 27	153,299 72	412,515	11,425
38	98,984 13	9,759 90	1,102 31	42,643 15	152,489 49	317,250	35,395
39	86,493 05	76,111 48	4,197 47	57,661 87	224,463 87	601,015	23,123
40	238,164 63	148,322 93	10,649 25	134,247 74	531,384 55	1,617,274	39,280
41	45,880 95	22,808 58	1,403 46	24,865 82	94,958 81	152,671	13,179
42	11,203 76	2,685 41	560 15	4,598 20	19,047 52	25,933	1,993
43	28,609 00	1,038 10	590 65	8,098 14	38,335 89	51,908	5,426
44	48,742 07	2,337 09	450 37	14,463 67	65,993 20	111,868	10,941
45	25,854 99	1,782 94	516 09	8,352 37	36,506 39	64,943	3,653
46	65,596 54	6,307 97	935 11	18,407 05	91,246 67	131,697	16,242
47	28,314 43	5,474 91	475 30	7,544 47	41,809 11	64,518	5,161
48	52,430 59	32,168 09	1,296 61	26,312 90	112,208 19	152,979	9,138
49	68,208 74	14,236 37	2,168 40	38,154 36	122,767 87	115,030	8,928
50	42,766 29	10,021 37	2,306 32	17,008 70	72,102 68	87,191	14,562
	3,901,674 92	734,216 20	80,743 39	1,559,801 75	6,276,436 26	13,202,261	898,111

THE PUBLIC

V. TABLE E—FINANCIAL

Cities	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Clergy Reserve Fund, balances and other sources	Total receipts for all Public School purposes
	$ c.	$ c.	$ c.	$ c.	$ c.
1 Belleville	1,964 14	43,548 42	.....	11,230 47	56,743 03
2 Brantford	3,875 09	116,580 00	91,507 65	3,741 24	215,703 98
3 Chatham	1,756 80	53,975 00	39,450 00	4,367 78	99,549 58
4 Fort William	4,133 51	113,102 66	153,317 48	.....	270,553 65
5 Galt	1,547 95	60,000 00	.....	2,765 09	64,313 04
6 Guelph	2,426 06	63,701 02	.....	504 79	66,631 87
7 Hamilton	16,759 12	580,576 00	406,678 92	73,946 20	1,077,960 24
8 Kingston	3,896 60	93,081 20	.....	7,074 23	104,052 03
9 Kitchener	1,932 14	83,921 44	22,500 00	811 78	109,165 36
10 London	12,190 24	347,036 87	.....	15,416 41	374,643 52
11 Niagara Falls	1,342 00	52,500 00	24,000 00	4,779 94	82,621 94
12 Ottawa	15,176 02	464,153 33	233,000 00	29,883 66	742,213 01
13 Peterborough	3,955 06	95,000 00	11,310 20	9,734 73	119,999 99
14 Port Arthur	4,298 96	85,000 00	115,974 00	3,138 58	208,411 54
15 St. Catharines	2,088 07	87,999 17	100,000 00	2,511 82	192,599 06
16 St. Thomas	3,009 95	76,500 00	.....	1,605 96	81,115 91
17 Sarnia	1,368 00	57,123 44	.....	2,712 02	61,203 46
18 Sault Ste. Marie	3,841 57	133,664 00	131,210 17	5,946 08	274,661 82
19 Stratford	2,597 41	66,000 00	.....	276 48	68,873 89
20 Toronto	67,102 02	3,410,644 27	.....	73,894 02	3,551,640 31
21 Welland	1,008 30	43,300 00	6,500 00	20,958 25	71,766 55
22 Windsor	4,498 54	132,219 95	74,829 63	9,191 66	220,739 78
23 Woodstock	1,539 15	32,800 00	.....	4,069 40	38,408 55
Totals	162,306 70	6,292,426 77	1,410,278 05	288,560 59	8,153,572 11
Towns					
1 Alexandria	28 00	2,195 93	.....	416 07	2,640 00
2 Alliston	152 00	4,500 00	.....	914 90	5,566 90
3 Almonte	230 00	7,918 40	.....	871 12	9,019 52
4 Amherstburg	133 00	4,716 62	.....	2,263 71	7,113 33
5 Arnprior	269 00	11,680 54	.....	2,454 76	14,404 30
6 Aurora	235 00	9,700 00	.....	166 76	10,101 76
7 Aylmer	295 66	8,405 52	.....	1,871 53	10,572 71
8 Bala	511 21	1,625 23	.....	797 58	2,934 02
9 Barrie	875 80	31,307 35	.....	2,636 05	34,819 20
10 Blenheim	161 00	6,118 64	.....	1,249 44	7,529 08
11 Blind River	434 86	3,499 16	.....	284 77	4,218 79
12 Bonfield	491 63	288 71	.....	562 41	1,342 75
13 Bothwell	76 00	1,600 00	.....	60 00	1,736 00
14 Bowmanville	345 00	9,687 00	.....	525 30	10,557 30
15 Bracebridge	606 36	11,257 59	.....	205 82	12,069 77
16 Brampton	415 00	15,500 00	.....	326 67	16,241 67
17 Bridgeburg	215 00	32,912 90	.....	13 00	33,140 90
18 Brockville	911 00	34,500 00	.....	3,709 95	39,120 95
19 Bruce Mines	895 36	3,700 00	.....	436 32	5,031 68
20 Burlington	271 00	8,798 49	34,835 72	1,104 86	45,010 07
21 Cache Bay	372 86	3,320 00	.....	270 34	3,963 20
22 Campbellford	333 00	10,720 00	.....	1,027 40	12,080 40
23 Capreol	285 61	1,777 42	15,181 60	196 58	17,441 21
24 Carleton Place	450 00	14,030 00	.....	84 27	14,564 27
25 Charlton	342 36	1,700 00	.....	964 49	3,006 85
26 Chesley	216 40	6,484 53	.....	1,148 76	7,849 69
27 Clinton	1,244 80	6,002 68	.....	271 68	7,519 16
28 Cobalt	1,090 36	36,804 50	.....	4,204 17	42,099 03
29 Cobourg	474 56	14,412 06	4,938 39	1,318 52	21,143 53
30 Cochrane	464 36	8,402 78	.....	557 95	9,425 09
31 Collingwood	813 20	31,600 82	.....	463 83	32,877 85
32 Copper Cliff	995 36	25,061 84	16,699 94	4,762 51	47,819 65
33 Cornwall	1,398 50	13,622 53	.....	2,206 00	17,227 03

SCHOOLS—Continued

STATEMENT—Continued

	Expenditure						
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus and other equipment, prizes and school books	Rent and repairs, fuel and other expenses	Total expenditure for all Public School purposes	Value of school sites, buildings and furniture	Value of equipment
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
1	28,861 61	.....	.....	21,857 89	50,719 50	325,000	3,000
2	80,882 77	92,940 95	3,467 07	38,350 65	215,641 44	405,425	51,294
3	43,006 47	40,647 34	2,031 39	12,457 04	98,142 24	176,500	8,500
4	78,916 42	157,826 79	9,057 21	24,662 20	270,462 62	1,035,550	26,375
5	44,303 57	2,200 50	.....	16,845 16	63,349 23	285,000	8,500
6	43,270 51	1,216 89	315 48	20,824 77	65,627 65	232,060	3,000
7	347,389 68	367,122 73	20,444 24	343,003 59	1,077,960 24	2,397,100	66,437
8	55,465 08	20,009 96	704 12	25,526 98	101,706 14	343,100	6,650
9	56,278 51	24,686 30	2,156 36	25,685 45	108,806 62	325,000	18,500
10	216,889 40	5,826 62	701 93	151,225 57	374,643 52	1,169,544	56,370
11	37,395 60	25,033 49	627 59	18,907 00	81,963 68	201,500	5,600
12	330,925 85	212,424 56	.....	150,652 25	694,002 66	1,614,205	104,255
13	70,126 02	19,082 58	4,908 94	25,882 45	119,999 99	338,500	20,000
14	58,785 17	104,132 11	5,484 40	24,382 09	192,783 77	450,000	3,118
15	47,066 34	71,036 28	430 03	36,670 56	155,203 21	406,080	2,675
16	62,535 75	4,137 07	212 44	13,151 62	80,036 88	160,000	11,000
17	38,276 16	3,025 74	1,558 59	13,513 69	56,374 18	235,000	2,496
18	81,195 97	131,210 17	3,178 12	53,967 64	269,551 90	740,000	8,000
19	44,929 53	163 00	5,348 51	17,576 09	68,017 13	310,000	20,000
20	2,061,736 27	.....	108,907 54	1,364,707 15	3,535,350 96	10,659,955	89,464
21	26,467 75	6,998 18	.....	12,118 13	45,584 06	131,818	1,438
22	100,278 01	74,984 83	.....	45,476 94	220,739 78	529,725	12,000
23	26,627 60	.....	459 58	11,321 37	38,408 55	210,000	5,000
	3,981,610 04	1,364,706 09	169,993 54	2,468,766 28	7,985,075 95	22,681,062	533,672
1	1,310 00	375 80	22 81	515 40	2,224 01	6,500	200
2	3,525 00	.....	.....	1,524 38	5,049 38	40,000	168
3	5,657 08	.....	25 00	3,337 44	9,019 52	16,221	349
4	4,989 55	153 39	100 00	1,656 40	6,899 34	30,000	500
5	9,391 19	57 82	.....	2,742 50	12,191 51	17,300	500
6	7,330 23	.....	61 48	2,691 55	10,083 26	25,000	1,000
7	7,004 45	.....	.....	2,767 59	9,772 04	19,500	700
8	1,405 00	463 06	96 36	700 25	2,664 67	9,000	150
9	21,568 59	684 87	47 69	10,360 16	32,661 31	44,600	1,500
10	4,103 57	995 21	69 24	2,084 13	7,252 15	31,000	300
11	2,980 93	.....	93 52	855 63	3,930 08	12,000	250
12	700 00	.....	.....	47 18	747 18	.....	175
13	1,277 18	.....	23 75	359 12	1,660 05	12,500	100
14	7,910 00	.....	296 40	2,350 11	10,556 51	46,000	596
15	7,279 50	290 25	45 60	4,447 86	12,063 21	25,700	475
16	10,978 90	260 15	21 75	4,343 63	15,604 43	65,000	550
17	6,443 60	23,302 05	165 06	3,230 19	33,140 90	30,000	200
18	25,604 30	574 00	344 06	12,556 70	39,079 06	100,000	5,000
19	2,410 00	37 50	.....	2,172 19	4,619 69	35,000	203
20	6,719 98	29,509 42	7 20	3,104 26	39,340 86	90,060	300
21	2,076 75	.....	14 45	1,755 41	3,846 61	4,500	500
22	8,520 25	392 60	177 30	2,107 53	11,197 68	50,000	2,500
23	1,520 00	14,894 17	.....	828 03	17,242 20	22,000	500
24	10,595 21	553 88	.....	2,870 08	14,019 17	39,000	500
25	1,720 83	.....	22 00	560 05	2,302 88	4,000	222
26	4,608 36	.....	.....	2,285 96	6,894 32	25,000	350
27	6,125 80	.....	.....	1,393 36	7,519 16	12,570	850
28	19,117 35	1,253 99	3,436 59	12,225 27	36,033 20	71,000	10,500
29	10,643 11	3,148 45	.....	7,350 82	21,142 38	108,000	3,500
30	4,725 22	.....	272 82	3,864 82	8,862 86	70,000	2,000
31	20,870 48	137 25	173 60	11,696 52	32,877 85	111,850	11,000
32	14,763 46	20,992 64	60 25	7,364 67	43,181 02	70,000	900
33	12,071 57	.....	.....	3,688 72	15,760 29	45,000	4,000

THE PUBLIC
V. TABLE E—FINANCIAL

Towns—Continued	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Clergy Reserve Fund, balances and other sources	Total receipts for all Public School purposes
	$ c.	$ c.	$ c.	$ c.	$ c.
34 Deseronto	235 00	6,620 12		395 40	7,248 52
35 Dresden	169 00	4,804 00		163 01	5,136 01
36 Dryden	466 61	5,033 92		151 10	5,651 63
37 Dundas	683 00	15,950 00		791 42	17,424 42
38 Dunnville	551 40	8,450 00		66 62	8,868 02
39 Durham	178 00	5,352 00		549 29	6,079 29
40 Eastview	119 00	7,620 00		1,346 59	9,085 59
41 Englehart	419 86	3,141 39	580 68	70 51	4,212 44
42 Essex	196 20	6,930 54		851 02	7,977 76
43 Ford	113 00	7,913 83		162 30	8,189 13
44 Forest	176 60	5,900 00		597 68	6,674 28
45 Fort Frances	592 36	13,000 00		1,811 11	15,403 47
46 Gananoque	386 00	12,422 63		1,399 05	14,207 68
47 Goderich	498 28	14,591 03		971 70	16,061 01
48 Gore Bay	438 86	3,013 84		581 95	3,834 65
49 Gravenhurst	574 11	5,956 77		266 13	6,797 01
50 Haileybury	700 36	12,241 94		888 15	13,830 45
51 Hanover	323 00	9,636 06		467 03	10,426 09
52 Harriston	177 00	4,299 77		11 86	4,488 63
53 Hawkesbury	106 00	2,913 79		2,306 61	5,326 40
54 Hespeler	497 81	13,975 62	735 83	1,891 06	17,098 32
55 Huntsville	655 36	7,265 78		342 55	8,263 69
56 Ingersoll	650 14	17,397 00		1,140 23	19,187 37
57 Iroquois Falls	547 36	13,077 69	83,672 25	88 57	97,385 87
58 Kearney	561 42	1,660 26		151 87	2,373 55
59 Keewatin	536 61	7,095 79		601 29	8,233 69
60 Kenora	997 36	25,635 91		1,937 40	28,570 67
61 Kincardine	228 00	8,035 00		634 89	8,897 89
62 Kingsville	389 53	8,078 24		396 25	8,864 02
63 Latchford	337 11	1,405 00		314 57	2,056 68
64 Leamington	405 00	13,960 47		221 03	14,586 50
65 Lindsay	712 00	26,028 98		2,349 52	29,090 50
66 Listowel	394 00	8,250 00		45 65	8,689 65
67 Little Current	480 61	4,328 38		413 14	5,222 13
68 Massey	384 11	1,780 88		362 50	2,527 49
69 Matheson	351 11	1,902 68		276 63	2,530 42
70 Mattawa	303 11	862 53		2,692 55	3,858 19
71 Meaford	305 00	11,700 00		669 61	12,674 61
72 Merritton	264 75	8,101 60		4,150 27	12,516 62
73 Midland	785 00	37,342 17		1,771 26	39,893 43
74 Milton	221 80	7,044 94		396 27	7,663 01
75 Mimico	452 71	8,595 51	50,000 00	2,129 77	61,177 99
76 Mitchell	214 00	6,509 00		275 57	6,989 57
77 Mount Forest	159 00	4,400 00		862 88	5,421 88
78 Napanee	356 00	11,852 00		134 29	12,342 29
79 New Liskeard	604 36	10,385 97		171 34	11,161 67
80 Newmarket	388 91	13,000 00		1,341 80	14,730 71
81 Niagara	201 00	4,480 84	2,500 00	1,475 40	8,657 24
82 North Bay	1,638 06	45,493 34		281 22	47,412 62
83 Oakville	271 80	17,512 27		1,913 82	19,697 89
84 Orangeville	502 75	9,228 43		674 49	10,405 67
85 Orillia	1,908 50	18,990 00		25,048 42	45,946 92
86 Oshawa	1,029 00	40,975 40		1,822 93	43,827 33
87 Owen Sound	1,509 00	63,785 00		1,439 57	66,733 57
88 Palmerston	209 00	5,490 05		54 15	5,753 20
89 Paris	602 80	13,900 00		160 92	14,663 72
90 Parkhill	116 00	2,850 00		114 36	3,080 36
91 Parry Sound	1,194 36	21,384 49		892 04	23,380 89
92 Pembroke	626 12	18,422 99	5,458 52	4,402 77	28,890 40

SCHOOLS—Continued
STATEMENT—Continued

	Expenditure							
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus, prizes and school books	Rent and repairs, fuel, and other expenses	Total expenditure for all Public School purposes	Value of school sites, buildings and furniture	Value of equipment
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
34	5,486 76	.....	117 89	1,240 38	6,845 03	12,225	1,775
35	4,082 82	.....	163 62	889 67	5,136 11	18,000	350
36	3,815 59	457 70	149 95	1,149 35	5,572 59	6,000	500
37	11,822 80	413 43	38 25	5,061 95	17,336 43	121,400	8,000
38	6,956 15	50 08	27 60	1,162 14	8,195 95	28,000	900
39	4,212 16	1 40	527 97	1,337 76	6,079 29	12,000	400
40	6,245 74	768 68	579 09	1,422 74	9,016 25	45,200	300
41	2,572 90	.....	56 65	1,570 08	4,199 63	8,800	700
42	5,944 72	.....	.....	1,287 58	7,232 30	20,000	8,000
43	4,251 57	1,189 90	74 25	2,421 09	7,936 81	35,000	500
44	4,528 04	.....	46 07	1,942 29	6,516 40	30,000	350
45	8,673 15	918 18	.....	5,638 89	15,230 22	76,000	2,000
46	10,022 87	247 00	301 16	3,514 40	14,085 43	21,000	3,000
47	10,781 89	.....	.....	5,259 12	16,041 01	45,000	1,650
48	2,926 00	.....	.....	889 25	3,815 25	6,000	1,110
49	4,827 15	.....	.....	1,899 97	6,727 12	18,000	510
50	10,068 30	68 81	.....	3,693 34	13,830 45	38,000	2,700
51	7,519 28	96 23	.....	2,349 46	9,964 97	39,850	1,000
52	3,150 00	264 00	43 78	1,030 85	4,488 63	20,000	2,000
53	3,134 16	.....	.....	908 23	4,042 39	25,000	1,000
54	9,709 07	3,040 07	.....	3,240 23	15,989 37	35,850	1,000
55	6,383 47	100 00	86 64	1,393 58	7,963 69	25,000	2,100
56	12,606 61	265 19	54 93	4,945 86	17,872 59	80,000	1,000
57	7,059 50	83,672 25	756 58	5,251 17	96,739 50	1,248	691
58	1,387 33	236 99	21 99	389 50	2,035 81	3,100	265
59	5,368 41	21 90	82 05	2,228 67	7,701 03	18,760	1,740
60	19,281 24	347 41	178 75	8,347 93	28,155 33	48,650	3,000
61	5,170 00	31 75	.....	2,143 82	7,345 57	18,500	1,500
62	6,952 50	262 35	68 65	1,555 40	8,838 90	55,000	2,000
63	1,470 45	11 46	.....	492 85	1,974 76	4,300	95
64	10,638 76	849 23	257 00	2,634 65	14,379 64	48,000	3,000
65	18,826 75	403 42	.....	9,704 65	28,934 82	200,000	5,000
66	6,475 56	90 60	87 88	2,027 47	8,681 51	40,000	500
67	3,524 37	27 65	51 25	1,204 05	4,807 32	11,400	600
68	1,964 25	.....	.....	471 94	2,436 19	3,000	350
69	1,416 03	70 30	.....	949 48	2,435 81	2,850	740
70	745 44	.....	.....	261 04	1,006 48	2,000	218
71	8,938 01	271 20	226 97	2,800 84	12,237 02	15,000	400
72	5,419 61	54 00	255 98	1,835 83	7,565 42	18,325	266
73	24,331 51	1,169 86	15 00	13,082 38	38,598 75	120,000	2,500
74	5,800 00	.....	49 39	1,152 62	6,982 01	30,000	300
75	11,340 96	43,385 77	20 39	4,149 18	58,896 30	130,000	1,100
76	5,009 05	33 90	.....	1,723 49	6,766 44	33,000	400
77	3,344 24	.....	.....	1,518 62	4,862 86	11,000	3,500
78	8,743 00	.....	.....	1,874 11	10,617 11	37,000	3,000
79	7,468 17	223 61	21 60	2,883 34	10,596 72	27,000	450
80	9,408 66	.....	192 94	3,249 58	12,851 18	50,000	1,600
81	3,716 25	2,822 93	188 04	1,245 68	7,972 90	15,000	3,000
82	27,221 16	1,320 45	870 66	17,692 39	47,104 66	200,000	15,000
83	8,491 15	5,793 57	142 81	4,009 04	18,436 57	44,000	750
84	7,556 25	459 77	182 90	1,873 85	10,072 77	20,000	3,500
85	23,292 35	3,217 14	1,727 14	9,093 04	37,329 67	130,000	2,000
86	30,731 95	2,511 61	723 78	9,443 80	43,411 14	185,000	5,000
87	43,105 00	397 31	1,508 51	21,722 75	66,733 57	212,000	12,000
88	3,901 70	190 50	130 00	1,384 01	5,606 21	25,000	4,000
89	10,184 00	.....	238 84	3,456 76	13,879 60	65,000	2,000
90	2,320 00	.....	.....	732 30	3,052 30	6,000	1,000
91	15,359 57	1,114 44	.....	5,647 66	22,121 67	98,000	2,000
92	15,612 17	988 21	554 84	11,735 18	28,890 40	117,000	765

THE PUBLIC

V. TABLE E—FINANCIAL

Towns—Concluded	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Clergy Reserve Fund, balances and other sources	Total receipts for all Public School purposes
	$ c.	$ c.	$ c.	$ c.	$ c.
93*Penetanguishene	682 00	18,719 09	.....	338 86	19,739 95
94 Perth	257 00	10,081 43	.....	159 01	10,497 44
95 Petrolia	361 00	12,500 00	.....	294 73	13,155 73
96 Picton	373 20	10,800 00	.....	194 43	11,367 63
97 Port Colborne	446 00	17,500 00	19,764 10	2,417 59	40,127 69
98 Port Hope	547 00	12,500 00	.....	1,195 61	14,242 61
99 Powassan	411 86	2,500 00	.....	396 73	3,308 59
100 Prescott	263 00	7,282 11	.....	173 08	7,718 19
101 Preston	504 20	20,000 00	.....	1,028 92	21,533 12
102 Rainy River	835 42	8,950 00	.....	66 45	9,851 87
103 Renfrew	1,726 28	12,709 91	.....	1,695 89	16,132 08
104 Ridgetown	246 00	5,528 92	.....	54 18	5,829 10
105 Rockland	38 00	1,581 58	.....	287 17	1,906 75
106 St. Mary's	493 00	12,075 72	.....	88 84	12,657 56
107 Sandwich	250 00	12,990 44	.....	3,510 32	16,750 76
108 Seaforth	221 20	6,339 19	.....	243 02	6,803 41
109 Simcoe	453 00	9,888 11	.....	6,258 17	16,599 28
110 Sioux Lookout	.....	6,832 98	.....	22 65	6,855 63
111 Smith's Falls	848 00	29,047 60	.....	274 16	30,169 76
112 Southampton	187 00	6,187 14	.....	340 20	6,714 34
113 Stayner	109 00	5,000 00	.....	1,365 27	6,474 27
114 Strathroy	308 00	8,400 00	.....	105 57	8,813 57
115 Sturgeon Falls	435 35	4,720 67	.....	3,096 67	8,252 69
116 Sudbury	1,135 35	29,623 11	8,929 27	4,612 79	44,300 52
117 Thessalon	587 35	8,043 18	.....	63	8,631 16
118 Thornbury	79 00	3,632 16	.....	158 20	3,869 36
119 Thorold	286 00	11,500 00	.....	1,035 76	12,821 76
120 Tilbury	80 00	3,704 10	.....	1,469 32	5,253 42
121 Tillsonburg	372 20	12,756 88	.....	446 22	13,575 30
122 Timmins	569 35	14,200 00	.....	281 51	15,050 86
123 Trenton	782 00	22,000 00	.....	6,325 48	29,107 48
124 Trout Creek	586 69	1,200 00	.....	124 45	1,911 14
125 Uxbridge	189 00	5,550 00	.....	487 13	6,226 13
126 Vankleek Hill	81 00	3,077 70	.....	3,487 69	6,646 39
127 Walkerton	170 80	5,911 06	.....	110 01	6,191 87
128 Walkerville	1,054 45	38,500 00	.....	548 02	40,102 47
129 Wallaceburg	358 20	11,620 93	.....	1,611 59	13,590 72
130 Waterloo	559 10	19,500 00	.....	1,876 00	21,935 10
131 Webbwood	376 85	2,556 60	.....	186 94	3,120 39
132 Weston	291 00	13,497 11	62,606 92	4,022 83	80,417 86
133 Whitby	500 00	8,500 00	.....	964 65	9,964 65
134 Wiarton	197 00	6,612 30	.....	57 16	6,866 46
135 Wingham	280 20	6,453 69	.....	386 64	7,120 53
Totals	63,456 50	1,552,389 79	306,183 22	167,749 44	2,089,778 95
Totals					
1 Rural Schools	967,847 33	4,783,063 51	416,755 59	3,157,067 26	9,324,733 69
2 Cities	162,306 70	6,292,426 77	1,410,278 05	288,560 59	8,153,572 11
3 Towns	63,456 50	1,552,389 79	306,183 22	167,749 44	2,089,778 95
4 Villages	23,871 21	478,176 77	74,623 84	145,129 68	721,801 50
5 Grand Totals, 1919	1,217,481 74	13,106,056 84	2,207,840 70	3,758,506 97	20,289,886 25
6 Grand Totals, 1918	901,971 85	11,784,346 16	.....	3,954,315 10	16,640,633 11
7 Increases	315,509 89	1,321,710 68	.....	.....	3,649,253 14
8 Percentages	6.00	64.59	10.88	18.52	.....

* Including Protestant Separate School.

SCHOOLS—Concluded

STATEMENT—Concluded

	Expenditure						
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus and other equipment, prizes and school books	Rent and repairs, fuel and other expenses	Total expenditure for all Public School purposes	Value of school sites, buildings and furniture	Value of equipment
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
93	12,182 92	355 20	462 88	6,419 11	19,420 11	40,000	650
94	6,886 74	909 98	.....	2,562 69	10,359 41	34,500	1,500
95	9,130 83	.....	.....	3,867 79	12,998 62	43,000	750
96	8,260 00	131 11	.....	2,969 24	11,360 35	22,000	2,637
97	10,016 00	19,288 44	.....	3,802 80	33,107 24	97,000	700
98	10,294 85	232 96	.....	3,202 97	13,730 78	60,895	800
99	2,700 00	4 55	37 61	367 74	3,109 90	10,000	300
100	5,473 93	77 97	.....	2,033 29	7,585 19	20,732	636
101	14,887 96	279 00	24 40	6,341 76	21,533 12	140,000	5,500
102	6,558 91	1,152 79	.....	1,948 16	9,659 86	26,800	450
103	10,341 01	.....	256 71	5,534 36	16,132 08	60,000	8,000
104	4,476 46	.....	.....	1,173 18	5,649 64	35,000	380
105	1,390 00	.....	.....	266 93	1,656 93	2,850	130
106	9,145 87	.....	.....	3,328 51	12,474 38	65,000	700
107	7,957 70	117 75	231 00	2,384 71	10,691 16	125,000	500
108	4,718 93	.....	.....	1,464 90	6,183 83	15,000	1,200
109	10,927 72	2,619 13	.....	3,052 43	16,599 28	50,000	519
110	2,943 95	30 10	73 20	3,808 25	6,855 50	16,500	262
111	19,049 24	183 20	120 22	10,423 68	29,776 34	180,000	16,000
112	4,685 00	65 55	59 06	1,264 69	6,074 30	22,400	2,600
113	2,696 81	.....	.....	891 38	3,588 19	9,667	236
114	7,302 24	.....	.....	1,457 72	8,759 96	25,000	450
115	4,294 56	279 74	83 40	2,149 43	6,807 13	30,000	350
116	20,415 41	12,833 30	24 32	10,599 18	43,872 21	154,197	900
117	5,395 75	826 04	.....	2,142 97	8,364 76	29,000	400
118	2,441 58	383 12	.....	1,042 90	3,867 60	27,000	250
119	8,208 05	634 00	.....	3,913 76	12,755 81	46,000	600
120	2,145 00	2,385 55	100 00	584 10	5,214 65	22,000	240
121	9,584 57	985 35	226 11	2,779 27	13,575 30	45,000	5,000
122	7,188 88	1,465 57	.....	4,630 16	13,284 61	46,500	4,417
123	16,681 62	.....	480 13	7,869 36	25,031 11	29,000	2,350
124	1,538 87	.....	.....	299 67	1,838 54	3,050	302
125	4,996 50	25 00	22 25	1,182 38	6,226 13	20,500	1,000
126	2,784 92	.....	.....	1,043 46	3,828 38	10,000	1,000
127	4,193 46	.....	280 99	1,439 55	5,914 00	20,000	2,700
128	26,326 73	854 11	215 82	11,044 71	38,441 37	137,500	350
129	9,233 45	619 16	.....	2,531 94	12,384 55	35,000	800
130	13,847 91	1,421 94	.....	5,872 51	21,142 36	47,000	4,600
131	2,045 00	198 82	42 00	817 58	3,103 40	10,000	1,000
132	11,300 21	45,482 88	.....	4,213 23	60,996 32	50,000	800
133	6,610 50	493 55	43 54	2,516 23	9,663 82	21,000	3,000
134	5,183 95	88 94	78 76	1,494 71	6,846 36	14,000	300
135	5,026 22	681 40	.....	1,202 69	6,910 31	25,000	300
	1,118,714 18	351,042 95	19,261 12	471,971 27	1,960,989 52	6,022,790	251,172
1	3,901,674 92	734,216 20	80,743 39	1,559,801 75	6,276,436 26	13,202,261	898,111
2	3,981,610 04	1,364,706 09	169,993 54	2,468,766 28	7,985,075 95	22,681,062	533,672
3	1,118,714 18	351,042 95	19,261 12	471,971 27	1,960,989 52	6,022,790	251,172
4	360,877 11	58,493 80	6,051 36	182,922 17	608,344 44	1,707,888	84,103
5	9,362,876 25	2,508,459 04	276,049 41	4,683,461 47	16,830,846 17	43,614,001	1,767,058
6	8,323,816 40	1,066,604 60	149,536 12	4,167,208 37	13,707,165 49	39,436,997	1,598,035
7	1,039,059 85	1,441,854 44	126,513 29	516,253 10	3,123,680 68	4,177,004	169,023
8	55.62	14.90	1.64	27.82	.....	.....	.....

Cost per pupil, enrolled attendance: Rural Schools, $30.78; Cities, $45.83; Towns, $28.25; Villages, $25.13; Province, $35.67.

ROMAN CATHOLIC
I. TABLE F—FINANCIAL

Rural Schools	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Balances, subscribed and other sources	Total amount received
	$ c.	$ c.	$ c.	$ c.	$ c.
1 Bruce	1,672 23	8,343 88	....	7,106 16	17,122 27
2 Carleton	1,665 87	13,451 18	5,441 68	6,067 62	26,626 35
3 Essex	5,814 42	25,144 39	3,056 86	12,699 01	46,714 68
4 Frontenac	4,197 90	5,433 80	.....	4,247 85	13,879 55
5 Grey	1,470 60	5,216 97	.....	3,315 78	10,003 35
6 Hastings	2,225 56	3,479 40	.....	2,673 44	8,378 40
7 Huron	2,535 36	6,563 79	.....	4,125 26	13,224 41
8 Kent	1,126 23	5,779 88	225 00	3,858 09	10,989 20
9 Lambton	117 77	1,866 74	8,263 20	849 98	11,097 69
10 Lanark	1,051 04	2,134 93	.....	1,092 77	4,278 74
11 Leeds and Grenville	622 70	405 41	.....	999 93	2,028 04
12 Lennox and Addington	272 11	750 87	.....	600 70	1,623 68
13 Middlesex	597 38	3,503 64	.....	2,304 89	6,405 91
14 Norfolk	198 61	1,149 55	.....	458 06	1,806 22
15 Northumberland and Durham	2,385 67	2,705 37	.....	1,133 54	6,224 58
16 Ontario	209 08	323 59	.....	1,246 52	1,779 19
17 Peel	85 33	580 98	.....	442 00	1,108 31
18 Perth	2,956 94	8,269 82	.....	4,528 12	15,754 88
19 Peterborough	588 13	2,408 69	650 25	1,730 31	5,377 38
20 Prescott and Russell	802 84	68,966 76	4,649 74	36,508 69	110,868 03
21 Renfrew	8,578 31	13,003 05	.....	7,256 01	28,837 37
22 Simcoe	609 04	6,405 94	.....	3,314 33	10,329 31
23 Stormont, Dundas & Glengarry	4,415 65	11,883 16	6,263 95	8,202 29	30,765 05
24 Victoria	361 36	1,330 84	.....	323 22	2,015 42
25 Waterloo	1,670 54	6,889 83	.....	6,922 03	15,482 40
26 Wellington	873 93	4,165 78	.....	2,345 12	7,384 83
27 York	189 88	868 81	.....	7,105 45	8,164 14
28 Districts	20,224 72	34,741 79	37,541 09	19,684 46	112,192 06
Totals	67,519 20	245,708 84	66,091 77	151,141 63	530,461 44
Cities					
1 Belleville	193 20	5,000 00	.....	746 07	5,939 27
2 Brantford	375 28	8,932 84	.....	11,538 26	20,846 38
3 Chatham	254 80	11,103 49	.....	14,030 07	25,388 36
4 Fort William	1,148 47	21,885 28	.....	4,092 66	27,126 41
5 Galt	80 36	2,215 37	.....	287 27	2,583 00
6 Guelph	409 40	9,739 00	.....	1,284 72	11,433 12
7 Hamilton	1,897 91	58,077 25	.....	38,164 94	98,140 10
8 Kingston	481 13	15,414 14	....	1,681 61	17,576 88
9 Kitchener	532 16	17,097 32	.....	4,135 43	21,764 91
10 London	855 56	25,588 61	.....	6,501 45	32,945 62
11 Niagara Falls	122 72	4,449 00	.....	1,926 30	6,498 02
12 Ottawa	.....	181,862 89	.....	2,805 92	184,668 81
13 Peterborough	707 58	15,471 22	.....	2,839 71	19,018 51
14 Port Arthur	673 81	10,585 89	.....	13,877 55	25,137 25
15 St. Catharines	308 72	12,785 58	.....	1,303 40	14,397 70
16 St. Thomas	192 04	5,504 39	.....	905 16	6,601 59
17 Sarnia	216 92	6,124 09	.....	6,634 14	12,975 15
18 Sault Ste. Marie	1,176 45	24,664 03	.....	56,399 07	82,239 55
19 Stratford	235 68	7,792 62	.....	17 57	8,045 87
20 Toronto	6,006 83	242,937 23	300,828 00	52,376 55	602,148 61
21 Windsor	939 72	39,460 23	.....	4,145 96	44,545 91
22 Woodstock	86 72	1,824 40	.....	121 41	2,032 53
Totals	16,895 46	728,514 87	300,828 00	225,815 22	1,272,053 55

SEPARATE SCHOOLS
STATEMENT, ETC.

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books	All other purposes	Total amount expended		
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	7,577 64	349 19	178 74	4,361 62	12,467 19	38,450	2,101
2	10 325 88	7,467 98	152 19	3,147 67	21,093 63	35,558	1,276
3	22,419 92	3,335 74	199 70	12,898 45	38,853 81	78,616	3,364
4	6,382 82	351 64	110 40	2,430 12	9,274 98	12,525	2,399
5	4,377 41	526 45	62 86	1,342 93	6,309 65	12,400	1,007
6	3,429 27	446 35	26 94	675 94	4,578 50	7,200	870
7	5,887 65	365 87	258 39	3,616 41	10,128 32	20,300	2,209
8	5,082 92	599 08	55 44	2,775 58	8,513 02	19,750	946
9	640 00	8,054 59	4 25	182 69	8,881 53	9,000	350
10	2,009 00	781 87	.....	1,062 21	3,853 08	1,900	225
11	834 06	116 52	.....	70 74	1,021 32	1,200	194
12	920 22	3 35	1 80	421 81	1,347 18	2,200	190
13	3,017 75	104 29	113 41	1,718 53	4,953 98	8,200	631
14	687 50	58 32	12 85	312 33	1,071 00	4,000	171
15	3,291 56	261 21	12 00	1,056 88	4,621 65	14,600	1,149
16	750 00	95 40	11 50	84 50	941 40	3,500	200
17	550 00	16 75	2 75	77 71	647 21	2,500	85
18	7,755 06	816 13	226 31	4,493 66	13,291 16	31,225	2,511
19	1,974 87	159 50	46 12	2,042 13	4,222 62	12,500	610
20	53,708 81	5,831 03	437 48	16,313 83	76,291 15	179,778	4,568
21	13,482 18	2,235 27	412 38	5,405 30	21,535 13	60,230	4,561
22	3,900 00	302 13	18 67	3,280 73	7,501 53	28,500	700
23	13,985 31	5,090 26	147 94	5,101 65	24,325 16	51,025	2,793
24	1,322 06	.....	27 33	294 00	1,643 39	4,100	275
25	7,073 74	894 88	202 37	1,853 43	10,024 42	26,250	1,673
26	3,656 97	131 95	58 25	1,322 71	5,169 88	11,425	956
27	1,000 00	1,111 04	.....	5,131 52	7,242 56	12,800	900
28	36,006 85	21,959 37	996 43	40,562 99	99,525 64	132,685	4,125
	222,049 45	61,466 16	3,776 41	122,038 07	409,330 09	822,417	41,039
1	2,057 50	1,310 99	.....	1,359 01	4,727 50	100,000	500
2	4,172 16	7,161 66	356 37	9,156 19	20,846 38	55,000	1,100
3	4,662 67	2,766 91	126 00	2,536 89	10,092 47	35,000	1,946
4	13,236 00	440 96	7 50	13,441 95	27,126 41	240,000	296
5	1,915 00	40 00	.....	628 00	2,583 00	9,800	240
6	5,946 00	457 10	.....	5,030 02	11,433 12	44,000	1,000
7	30,066 00	4,350 07	3,684 14	37,473 01	75,573 22	838,000	7,000
8	9,203 75	1,097 00	83 00	5,398 74	15,782 49	54,000	1,800
9	11,259 62	901 98	211 21	7,109 19	19,482 00	80,000	2,000
10	13,640 13	2,420 76	984 51	13,581 26	30,626 66	139,000	5,000
11	1,822 01	.....	67 05	3,162 48	5,051 54	30,000	327
12	103,358 96	2,094 18	153 78	79,061 89	184,668 81	621,288	36,255
13	11,848 75	.....	.....	6,965 93	18,814 68	105,000	3,058
14	6,023 50	29 40	152 54	18,371 89	24,577 33	81,953	1,500
15	5,515 00	524 57	145 18	5,030 22	11,214 97	40,000	2,500
16	2,541 67	598 59	198 27	2,771 97	6,110 50	33,000	1,036
17	2,590 00	2,385 00	31 04	4,631 16	9,637 20	33,385	1,377
18	11,929 59	5,280 46	.....	58,289 68	75,499 73	160,000	15,000
19	4,083 00	52 00	175 00	3,482 99	7,792 99	20,000	1,438
20	135,570 46	197,990 60	4,570 34	226,887 44	565,018 84	1,055,000	64,659
21	15,284 00	1,251 72	.....	27,397 02	43,932 74	240,000	10,000
22	1,086 44	.....	.....	935 34	2,021 78	16,500	1,157
	397,812 21	231,153 95	10,945 93	532,702 27	1,172,614 36	4,030,926	159,189

ROMAN CATHOLIC

I. TABLE F—FINANCIAL

Receipts

Towns	Legislative Grants	Municipal Grants and Assessments	Debentures	Balances, subscribed and other sources	Total amount received
	$ c.	$ c.	$ c.	$ c.	$ c.
1 Alexandria	297 12	6,102 36		844 49	7,243 97
2 Almonte	100 08	1,039 58		1,707 84	2,847 50
3 Amherstburg	56 11	2,800 00		2,526 53	5,382 64
4 Arnprior	209 39	5,178 05		4,274 89	9,662 33
5 Barrie	113 44	2,206 86		555 10	2,875 40
6 Blind River		3,376 37		67 02	3,443 39
7 Bonfield	200 00	947 82		1,504 57	2,652 39
8 Brockville	217 16	5,000 00		60 48	5,277 64
9 Cache Bay	930 85	1,000 00		102 95	2,033 80
10 Charlton	135 68	810 12		565 97	1,511 77
11*Chelmsford		1,976 10		203 66	2,179 76
12 Cobalt	479 29	16,038 14		12,569 53	29,086 96
13 Cobourg	42 50	2,845 80		110 47	2,998 77
14 Cochrane		3,432 89		2,808 46	6,241 35
15 Collingwood	89 37	2,365 55		526 41	2,981 33
16 Cornwall	533 68	6,725 80		10,005 80	17,265 28
17 Dundas	98 08	1,315 47		145 16	1,558 71
18 Eastview		9,017 97		358 65	9,376 62
19 Ford	176 36	4,748 60	13,750 20	760 99	19,436 15
20 Fort Frances	204 29	2,410 46		2,553 72	5,168 47
21 Goderich	70 72	801 10		477 01	1,348 83
22 Hanover	47 52	1,144 07		411 10	1,602 69
23*Haileybury	278 29	5,008 00		1,884 00	7,170 29
24*Hawkesbury		9,329 42		745 97	10,075 39
25 Ingersoll	101 72	1,667 52		1,363 36	3,132 60
26 Kearney	253 69	727 46		312 96	1,294 11
27 Keewatin	137 69	774 60		106 64	1,018 93
28 Kenora	172 69	3,700 00		191 85	4,064 54
29 Lindsay	230 44	5,671 53		648 81	6,550 78
30 Little Current	440 69			964 31	1,405 00
31 Massey	169 90	1,486 40		91 28	1,747 58
32 Mattawa	669 69	3,502 80		2,700 34	6,872 83
33 Merritton		1,605 53		847 98	2,453 51
34 Mount Forest	62 72	940 13		782 17	1,785 02
35 New Liskeard	154 08	650 00		438 25	1,242 33
36 Newmarket	44 36	1,018 66		1,038 83	2,101 85
37 North Bay	996 97	17,308 46		160 30	18,465 73
38 Oakville	44 72	864 39		494 17	1,403 28
39 Orillia	111 76	4,316 00		3,171 64	7,599 40
40 Oshawa	96 08	2,290 55		718 80	3,105 43
41 Owen Sound	128 51	3,154 42		797 34	4,080 27
42 Paris	74 04	635 14		1,853 02	2,562 20
43 Parkhill	54 86	527 85		232 00	814 71
44 Pembroke	402 96	8,776 29		2,211 65	11,390 90
45 Perth	137 76	2,063 86		453 32	2,654 94
46 Picton	24 36	773 60		688 34	1,486 30
47 Prescott		3,131 18		4,891 05	8,022 23
48 Preston	136 44	4,009 97		1,877 39	6,023 80
49 Rainy River	100 00	1,252 54		307 89	1,660 43
50 Renfrew	385 21	10,317 46		2,843 97	13,546 64

*No report for 1919 received.

SEPARATE SCHOOLS—Continued

STATEMENT, ETC.—Continued

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books	All other purposes	Total amount expended		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
1	3,700 00	.....	.....	3,538 24	7,238 24	35,000	800
2	1,425 89	40 00	10 00	299 96	1,775 85	5,000	510
3	2,100 00	364 63	155 70	2,746 10	5,366 43	39,000	1,745
4	3,999 00	.....	.....	5,138 05	9,137 05	15,000	582
5	1,680 00	.....	33 65	948 41	2,662 06	10,500	700
6	2,050 00	267 10	680 00	275 00	3,272 10	10,000	1,500
7	1,143 00	.....	11 00	204 20	1,358 20	2,000	69
8	3,000 00	800 00	.....	1,424 64	5,224 64	40,000	5,000
9	1,010 00	148 02	19 00	682 14	1,859 16	2,600	88
10	776 88	210 30	11 44	271 16	1,269 78	1,500	300
11	1,430 00	19 30	10 00	577 31	2,036 61	1,800	197
12	7,155 13	4,678 87	263 00	16,645 56	28,742 56	52,200	1,000
13	1,700 00	315 00	.....	972 90	2,987 90	17,500	875
14	2,400 00	293 25	203 68	2,050 09	4,947 02	15,000	400
15	1,410 00	55 01	.....	1,498 56	2,963 57	21,000	456
16	7,589 50	.....	.....	9,211 30	16,800 80	50,000	8,000
17	1,112 55	.....	3 38	377 99	1,493 92	7,000	277
18	4,350 00	509 88	124 74	3,750 01	8,734 63	42,000	122
19	2,839 21	13,791 47	29 34	2,744 89	19,404 91	10,000	377
20	1,716 00	54 36	128 67	1,717 65	3,616 68	30,000	400
21	675 05	.....	.....	635 83	1,310 88	8,300	381
22	1,080 00	.....	.....	520 04	1,600 04	500	100
23	3,650 00	.....	.....	2,012 73	5,662 73	15,000	200
24	6,994 71	85 30	94 45	2,758 14	9,932 60	55,000	1,265
25	886 64	.....	22 42	562 19	1,471 25	5,000	386
26	618 08	295 87	8 10	197 63	1,119 68	1,300	200
27	585 00	.....	10 00	261 92	856 92	4,500	300
28	1,102 50	.....	.....	1,299 06	2,401 56	20,000	300
29	3,500 00	106 40	5 00	2,580 94	6,192 34	80,000	1,000
30	720 00	.....	485 00	200 00	1,405 00	5,400	700
31	983 75	29 13	3 00	376 80	1,392 68	4,600	115
32	2,116 23	1,910 53	58 90	1,889 18	5,974 84	16,000	835
33	1,192 21	81 15	59 05	699 32	2,031 73	7,000	217
34	950 00	.....	12 57	544 97	1,507 54	4,500	171
35	768 75	43 80	24 93	310 35	1,147 83	5,000	30
36	775 00	74 50	.....	191 61	1,041 11	5,000	225
37	10,746 05	487 20	.....	7,075 93	18,309 18	80,000	280
38	600 00	459 85	.....	327 90	1,387 75	4,000	150
39	1,825 20	20 00	83 61	2,670 09	4,598 90	20,000	2,000
40	1,350 00	.....	37 35	1,443 06	2,830 41	30,000	500
41	1,431 50	115 34	25 00	2,004 68	3,576 52	10,000	375
42	1,227 08	228 00	47 25	619 85	2,122 18	15,000	240
43	615 00	.....	.....	89 95	704 95	3,000	84
44	6,860 25	1,062 71	.....	2,247 71	10,170 67	40,000	500
45	1,640 00	135 00	96 65	578 90	2,450 55	6,500	700
46	585 00	26 71	.....	138 40	750 11	2,000	200
47	1,733 30	.....	.....	1,536 35	3,269 65	20,000	1,500
48	1,532 38	.....	.....	2,350 89	3,883 27	28,000	875
49	655 00	52 95	65 23	428 72	1,201 90	13,000	300
50	3,564 38	1,000 00	6,114 18	2,510 04	13,188 60	50,000	1,000

ROMAN CATHOLIC

I. TABLE F—FINANCIAL

Towns—Concluded	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Balances, subscribed and other sources	Total amount received
	$ c.	$ c.	$ c.	$ c.	$ c.
51*Rockland	.....	5,358 00	.....	.....	5,358 00
52 St. Mary's	55 72	1,067 54	.....	1,056 25	2,179 51
53 Sandwich	779 44	4,509 23	.....	5,095 47	10,384 14
54 Seaforth	63 72	1,187 98	.....	2,233 99	3,485 69
55 Smith's Falls	145 44	2,670 03	31,297 95	776 92	34,890 34
56 Sturgeon Falls	345 68	11,059 38	.....	578 50	11,983 56
57 Sudbury	882 88	21,825 51	.....	26,697 95	49,406 34
58 Thorold	194 80	5,091 19	.....	5,823 33	11,109 32
59 Tilbury	121 20	2,561 82	.....	1,862 57	4,545 59
60 Timmins	364 88	13,000 00	15,000 00	2,741 49	31,106 37
61 Trenton	168 76	2,719 00	.....	2,560 62	5,448 38
62 Vankleek Hill	111 76	1,602 25	.....	716 77	2,430 78
63 Walkerton	130 44	2,072 62	.....	1,187 75	3,390 81
64 Walkerville	114 08	2,139 07	.....	230 48	2,483 63
65 Wallaceburg	229 80	3,543 60	.....	1,383 73	5,157 13
66 Waterloo	218 80	4,209 50	.....	1 92	4,430 22
67 Weston	.....	1,059 60	.....	863 40	1,923 00
68 Whitby	39 68	580 26	.....	507 58	1,127 52
Totals	13,378 35	263,043 45	60,048 15	130,277 15	466,747 10
Totals					
1 Rural Schools	67,519 20	245,708 84	66,091 77	151,141 63	530,461 44
2 Cities	16,895 46	728,514 87	300,828 00	225,815 22	1,272,053 55
3 Towns	13,378 35	263,043 45	60,048 15	130,277 15	466,747 10
4 Villages	1,253 60	20,724 68	28 87	12,078 41	34,085 56
5 Grand Totals, 1919	99,046 61	1,257,991 84	426,996 79	519,312 41	2,303,347 65
6 Grand Totals, 1918	68,612 94	1,330,378 86	.....	324,642 78	1,723,634 58
7 Increases	30,433 67	.....	.....	194,669 63	579,713 07
8 Decreases	.....	72,387 02	.....	.....	.....
9 Percentages	4.30	54.61	18.54	22.54	.....

*No report for 1919 received.

SEPARATE SCHOOLS—Continued

STATEMENT, ETC.—Concluded

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books	All other purposes	Total amount expended		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
51	3,900 00	598 00	210 00	650 00	5,358 00	20,000	2,000
52	850 00	.....	25 00	880 00	1,755 00	2,500	170
53	2,600 00	672 00	.....	1,952 79	5,224 79	11,500	358
54	1,222 04	500 91	137 15	960 63	2,820 73	6,900	300
55	1,618 00	.....	13 00	32,676 80	34,307 80	50,000	553
56	4,152 00	1,126 81	.....	2,002 28	7,261 09	20,000	562
57	13,225 95	12,936 10	.....	23,138 61	49,300 66	59,796	470
58	2,980 34	5,891 80	.....	1,405 74	10,277 88	28,500	1,143
59	1,620 00	100 00	79 88	816 24	2,616 12	13,000	323
60	5,233 88	16,284 31	1,394 77	5,547 11	28,460 07	50,000	300
61	1,300 00	1,081 03	5 69	2,211 77	4,598 49	10,000	1,265
62	1,500 00	.....	.....	284 40	1,784 40	25,000	213
63	1,329 00	357 98	44 95	886 17	2,618 10	20,000	600
64	725 00	349 18	.....	855 41	1,929 59	12,000	105
65	1,618 75	.....	8 96	2,612 52	4,240 23	30,000	964
66	2,853 55	258 70	.....	1,317 97	4,430 22	16,000	3,400
67	830 64	103 55	23 21	98 60	1,056 00	40,000	2,500
68	640 00	118 25	.....	220 65	978 90	6,000	100
	161,729 37	68,140 25	10,878 90	172,655 03	413,403 55	1,386,896	53,853
1	222,049 45	61,466 16	3,776 41	122,038 07	409,330 09	822,417	41,039
2	397,812 21	231,153 95	10,945 93	532,702 27	1,172,614 36	4,030,926	159,189
3	161,729 37	68,140 25	10,878 90	172,655 03	413,403 55	1,386,896	53,853
4	15,931 90	1,129 49	395 66	7,975 71	25,432 76	103,050	5,880
5	797,522 93	361,889 85	25,996 90	835,371 08	2,020,780 76	6,343,289	259,961
6	703,334 75	176,037 40	19,600 34	570,585 76	1,469,558 25	5,668,806	250,517
7	94,188 18	185,852 45	6,396 56	264,785 32	551,222 51	674,483	9,444
8	.....	.....	.....	.....	.....	.....	.....
9	39.46	17.91	1.28	41.34	.....	.....	.....

Cost per pupil, enrolled attendance : Rural Schools, $23.06 ; Cities, $32.13; Towns, $21.78; Villages, $15.65; Province, $27.00.

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Rural Schools	Teachers															
	No. of schools	Number of Teachers	Male	Female	Av. salary, male	Av. salary, female	No. who have ever attended a Model School in Ont.	No. who have ever attended a Normal Sch'l in Ont.	No. who have ever attended the Normal College or F. of E. in Ont.	Number of University Graduates	1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class	District	Kinder'ten-Prim.
					$	$									
1 Bruce	8	12	....	12	....	687	.....	7	2	....	2	7	....	..	..
2 Carleton	20	25	1	24	700	442	8	8	1	....	1	7	6	1	..
3 Essex	27	38	....	38	....	636	19	14	.....	....	....	17	16	..	..
4 Frontenac	11	11	1	10	750	575	2	9	.....	....	....	8	3	..	..
5 Grey	7	7	1	6	700	708	1	5	1	....	1	5	1	..	..
6 Hastings	6	6	....	6	....	658	1	5	.....	....	....	5	1	..	..
7 Huron	8	10	....	10	....	673	.....	10	.....	....	....	10	....	..	..
8 Kent	7	8	....	8	....	675	3	5	.....	....	1	4	3	..	..
9 Lambton	1	1	....	1	....	700	.....	1	.....	....	....	1	....	..	..
10 Lanark	3	4	....	4	....	569	3	1	.....	....	....	1	3	..	..
11 Leeds & Grenville	2	2	....	2	....	450	1	.....	.....	....	....	....	1	..	..
12 Lennox & Add'gton	2	2	....	2	....	575	1	1	.....	....	....	1	1	..	..
13 Middlesex	5	5	....	5	....	643	.....	5	.....	....	....	5	....	..	..
14 Norfolk	1	1	....	1	....	800	.....	1	.....	....	....	1	....	..	..
15 Northumberland and Durham	6	6	....	6	....	592	.....	6	.....	....	....	6	....	..	..
16 Ontario	1	1	....	1	....	750	.....	1	.....	....	....	1	....	..	..
17 Peel	1	1	....	1	....	550	.....	1	.....	....	....	....	1	..	..
18 Perth	6	11	1	10	750	760	.....	6	5	....	5	6	....	..	..
19 Peterborough	3	3	....	3	....	683	.....	3	.....	....	....	3	....	..	..
20 Prescott & Russell	93	127	3	124	483	409	77	5	.....	....	....	5	65	12	..
21 Renfrew	15	25	....	25	....	557	5	16	3	....	3	16	3	..	..
22 Simcoe	4	8	....	8	....	449	1	5	.....	....	....	5	....	..	..
23 Stormont, Dundas and Glengarry	20	29	1	28	550	496	12	15	2	1	3	12	9	1	..
24 Victoria	2	2	....	2	....	700	.....	2	.....	....	....	2	....	..	..
25 Waterloo	7	12	1	11	800	591	.....	7	.....	....	....	7	....	..	..
26 Wellington	6	6	....	6	....	683	.....	6	.....	....	....	5	1	..	..
27 York	1	2	....	2	....	500	.....	1	.....	....	....	1	....	..	..
28 Districts	56	78	1	77	1200	554	34	4	4	....	4	3	23	11	..
Totals	329	443	10	433	690	532	168	150	18	1	20	144	137	25	..
Cities															
1 Belleville	1	6	....	6	....	417	3	5	.....	....	....	5	....	..	..
2 Brantford	2	11	....	11	....	397	.....	5	1	....	1	5	....	..	..
3 Chatham	2	10	....	10	....	490	.....	9	1	....	1	9	....	..	..
4 Fort William	5	22	....	22	....	657	.....	19	.....	....	....	19	....	..	..
5 Galt	1	3	....	3	....	668	1	2	.....	....	....	2	1	..	..
6 Guelph	3	12	....	12	....	467	.....	7	.....	....	....	7	....	..	..
7 Hamilton	14	72	1	71	1400	404	19	42	9	4	9	37	2	..	3
8 Kingston	3	17	1	16	1300	397	.....	12	1	....	1	12	....	..	..
9 Kitchener	2	22	....	22	....	499	.....	17	3	....	3	17	....	..	..
10 London	9	31	....	31	....	440	.....	27	4	....	4	24	....	..	3
11 Niagara Falls	1	6	....	6	....	525	2	4	.....	....	....	4	1	..	..
12 Ottawa	33	195	45	150	735	439	71	56	6	1	6	56	69	2	..
13 Peterborough	4	28	....	28	....	427	.....	23	3	....	3	23	....	..	..
14 Port Arthur	2	10	....	10	....	610	.....	9	.....	....	....	9	....	..	..
15 St. Catharines	3	11	....	11	....	518	2	6	.....	....	....	6	1	..	..
16 St. Thomas	1	6	....	6	....	417	2	3	1	....	1	2	....	..	1
17 Sarnia	2	8	....	8	....	375	2	6	.....	....	....	6	....	..	..
18 Sault Ste. Marie	5	23	....	23	....	547	7	10	.....	....	....	11	5	4	..
19 Stratford	1	9	....	9	....	500	.....	4	.....	....	....	4	....	..	..
20 Toronto	28	196	25	171	911	619	19	145	13	4	13	145	4	..	4
21 Windsor	5	31	....	31	....	472	3	27	.....	....	....	27	3	..	..
22 Woodstock	1	3	....	3	....	350	.....	3	.....	1	....	3	....	..	..
Totals	128	732	72	660	813	500	131	441	42	10	42	433	86	6	11

SEPARATE SCHOOLS—Continued

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.

	Permanent Ungraded	Temporary	Number of Pupils	Boys	Girls	Average daily attendance	Percent. of average to total attendance	Kindergarten-Primary	First Reader, Part I, or Primer	First Reader, Part II, or 1st Book	Second Book	Third Book	Fourth Book	Beyond 4th Book	Art
1	3	...	512	254	258	378	73	...	91	81	103	121	115	1	512
2	1	9	1,048	524	524	599	57	...	385	169	178	169	142	5	704
3	1	4	1,770	910	860	1,076	61	59	564	301	347	272	221	6	1,707
4	...	...	274	157	117	161	59	...	66	36	21	72	74	5	274
5	...	...	214	108	106	104	49	...	46	21	21	52	73	1	214
6	...	...	128	63	65	79	62	...	26	21	20	27	33	1	128
7	...	...	309	155	154	214	69	...	40	43	56	82	77	11	309
8	...	...	327	161	166	216	66	...	100	68	45	61	50	3	326
9	...	...	55	25	30	30	55	...	17	7	5	8	17	1	55
10	...	...	84	38	46	53	63	...	23	7	11	28	10	5	84
11	...	1	22	9	13	11	50	...	4	4	4	9	1	.....	22
12	...	...	27	14	13	15	55	...	4	3	7	4	9	.....	27
13	...	...	93	51	42	67	72	...	14	12	12	20	35	.....	93
14	...	...	48	20	28	37	77	...	4	4	8	11	21	.....	48
15	...	...	106	59	47	65	61	...	16	16	9	34	29	2	106
16	...	...	61	25	36	46	75	...	11	8	9	14	19	.....	61
17	...	...	25	14	11	14	56	...	5	1	4	4	11	.....	25
18	...	...	411	180	231	270	66	...	77	37	47	87	103	60	401
19	...	...	125	69	56	81	65	...	22	15	13	35	40	.....	125
20	2	43	5,631	2,814	2,817	3,497	62	225	2,228	1,063	1,033	657	362	63	4,276
21	1	2	862	428	434	564	65	...	198	129	173	150	149	63	862
22	...	3	368	171	197	261	71	...	126	45	61	71	65	.....	368
23	2	2	1,107	531	576	600	54	...	344	168	169	156	147	123	994
24	...	...	92	50	42	68	74	...	16	6	14	24	32	.....	92
25	3	2	441	237	204	330	75	...	69	59	93	147	73	.....	441
26	...	...	129	64	65	86	67	...	27	17	19	36	30	.....	129
27	1	...	96	53	43	64	67	...	23	14	15	22	22	.....	96
28	...	37	3,381	1,657	1,744	1,624	48	549	1,165	573	554	352	185	3	2,489
	14	103	17,746	8,821	8,925	10,610	59.78	833	5,711	2,928	3,051	2,725	2,145	353	14,968
1	1	...	323	140	183	229	71	...	71	56	51	72	73	.....	323
2	4	1	647	280	367	465	72	...	190	118	89	139	111	.....	647
3	...	...	428	233	195	349	82	...	111	74	64	90	89	.....	428
4	1	2	1,316	656	660	857	65	...	547	258	256	137	118	.....	1,316
5	...	...	169	74	95	128	76	...	50	17	39	43	20	.....	169
6	5	...	637	367	270	446	70	...	131	97	135	159	115	.....	637
7	19	2	3,072	1,571	1,501	2,372	77	199	453	690	381	656	431	262	3,007
8	4	...	783	353	430	583	74	...	131	134	149	206	163	.....	783
9	2	...	1,031	523	508	758	74	...	153	138	307	196	201	36	1,031
10	...	...	1,168	586	582	880	75	12	287	156	191	236	206	80	1,148
11	1	...	273	138	135	176	64	...	86	49	47	43	48	.....	273
12	18	44	9,742	4,715	5,027	6,150	63	249	2,424	1,886	2,072	1,641	1,326	144	9,742
13	2	...	1,323	636	687	911	69	...	231	177	181	277	276	181	1,323
14	1	...	453	226	227	372	82	...	121	63	130	91	48	.....	453
15	4	...	552	288	264	362	66	...	105	108	125	110	104	.....	552
16	2	...	248	130	118	193	78	...	53	39	36	61	59	.....	248
17	2	...	290	168	122	254	88	...	77	45	41	73	54	.....	290
18	...	3	1,383	654	729	831	60	114	458	228	199	225	159	.....	1,383
19	5	...	379	216	163	292	77	...	75	39	86	92	87	.....	379
20	30	...	10,294	5,289	5,005	6,799	66	238	2,062	1,717	2,221	2,031	1,520	505	10,294
21	1	...	1,844	951	893	1,226	66	...	541	279	406	352	266	.....	1,844
22	...	...	132	62	70	92	69	...	20	28	27	37	20	.....	132
	102	52	36,487	18,256	18,231	24,725	67.76	812	8,377	6,396	7,233	6,967	5,494	1,208	36,402

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Rural Schools—Concluded	Geography	Music	Literature	Composition	Grammar	English History	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping
1 Bruce	421	512	512	512	116	237	340	512	512	512	...
2 Carleton	812	794	576	908	170	150	643	776	659	853	26
3 Essex	1,317	1,402	1,489	1,448	302	447	750	1,447	1,382	1,554	3
4 Frontenac	274	274	274	274	79	157	170	274	274	274	...
5 Grey	168	214	214	214	74	126	147	214	214	214	...
6 Hastings	128	128	128	128	34	61	81	128	128	128	...
7 Huron	269	309	309	309	88	170	226	309	309	309	...
8 Kent	231	299	250	250	85	76	137	286	286	327	2
9 Lambton	55	55	55	55	18	26	26	54	54	55	1
10 Lanark	84	84	84	84	15	43	54	84	84	84	...
11 Leeds & Grenville	22	22	22	22	1	9	13	22	22	22	...
12 Lennox & Add'tn.	27	27	27	27	9	13	20	27	27	27	...
13 Middlesex	93	93	93	93	35	47	60	93	93	93	...
14 Norfolk	48	48	48	48	21	21	32	48	48	48	...
15 Northumberland and Durham	106	106	106	106	31	64	74	106	106	106	...
16 Ontario	61	61	61	61	19	33	42	61	61	61	...
17 Peel	25	25	25	25	11	15	15	25	25	25	...
18 Perth	325	360	411	411	153	240	297	351	351	411	...
19 Peterborough	125	125	125	125	40	76	88	125	125	125	...
20 Prescott & Russell	3,692	3,707	2,313	4,168	568	602	2,819	3,795	2,956	4,124	46
21 Renfrew	823	818	827	846	229	350	464	827	827	862	1
22 Simcoe	368	368	368	368	65	153	187	368	368	368	...
23 Stormont, Dundas and Glengarry	872	883	896	979	376	381	473	536	662	1,044	66
24 Victoria	92	92	92	92	32	56	70	92	92	92	...
25 Waterloo	372	441	441	441	73	240	333	441	441	441	...
26 Wellington	102	129	129	129	26	66	85	129	129	129	...
27 York	96	96	96	96	22	44	44	96	96	96	...
28 Districts	1,981	2,269	2,152	2,289	470	777	1,343	2,466	2,255	2,689	43
Totals	12,989	13,741	12,123	14,508	3,162	4,680	9,033	13,692	12,586	15,073	188
Cities											
1 Belleville	323	323	323	323	73	145	145	323	323	323	...
2 Brantford	457	647	647	647	111	250	339	647	647	647	...
3 Chatham	428	428	428	428	89	179	243	428	428	428	...
4 Fort William	1,316	1,316	1,316	1,316	118	255	511	1,316	1,316	1,316	...
5 Galt	119	169	169	169	20	63	102	169	169	169	...
6 Guelph	637	637	637	637	115	274	409	637	637	637	...
7 Hamilton	3,007	3,072	3,072	3,072	628	1,665	1,665	2,810	2,810	3,072	65
8 Kingston	783	783	783	783	163	313	375	783	783	783	...
9 Kitchener	878	1,031	1,031	1,031	237	433	740	995	995	1,031	13
10 London	1,168	1,148	1,168	1,168	266	266	502	1,088	1,088	1,168	39
11 Niagara Falls	273	273	273	273	48	91	138	273	273	273	...
12 Ottawa	8,961	9,742	8,967	8,967	9,742	2,790	9,742	9,742	8,967	9,742	476
13 Peterborough	1,323	1,323	1,323	1,323	626	834	873	1,323	1,323	1,323	...
14 Port Arthur	453	453	453	453	48	59	79	453	453	453	...
15 St. Catharines	552	552	552	552	137	137	552	552	552	552	...
16 St. Thomas	248	248	248	248	59	59	195	248	248	248	...
17 Sarnia	290	290	290	290	54	127	127	290	290	290	...
18 Sault Ste. Marie	1,383	1,383	1,383	1,383	301	267	476	1,383	1,383	1,383	...
19 Stratford	304	379	379	379	87	179	265	379	379	379	...
20 Toronto	10,294	10,294	10,294	10,294	4,056	4,056	4,056	10,294	10,294	10,294	133
21 Windsor	1,844	1,844	1,844	1,844	266	331	341	1,844	1,844	1,844	...
22 Woodstock	132	132	132	132	20	57	84	132	132	132	...
Totals	35,173	36,467	35,712	35,712	17,264	12,830	21,959	36,109	35,334	36,487	726

SEPARATE SCHOOLS—Continued

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.—Continued

	Arithmetic and Mensuration	Algebra	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, inclusive)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science	Maps, Globes and Prizes: Number of Maps	Number of Globes	No. of Schools giving Prizes	Number of Trees planted on Arbor Day
1	1								77	35	12	105	11	2	
2	5	1			4	732	4		107	29		183	22	8	4
3	3	3				1,307	3	3	73	52		258	27	5	
4									59			108	11	8	
5	1	1		1	1				131	48		86	8	3	
6	1	1	1						14			62	7		
7	11	11	6				11		119	33		101	8	4	4
8	3	1	3	2		192			133			67	8	3	
9	1	1							55			13	2	1	
10	5	5		5	5		5		22			36	3	1	
11									15			23	2	1	
12									13			27	2	1	
13									65			65	5		
14												12	1		
15	2	2	1	1	1				48			50	6	2	6
16									33			9	1		
17												11	1		
18	50	60	43	50	43		50	9	199		26	89	8	1	4
19									53			31	3	1	
20	73				41	5,514	34		122	182	84	491	67	24	69
21	39	61	50	57	53	73	39		138		34	153	17	8	2
22						313						51	6	2	6
23	87	121	102	58	66	558	19	2	207	70	24	182	20	8	8
24									54			21	2	1	
25									165	87	28	111	10	5	7
26									61		19	80	6	2	4
27									44			8	1		
28	3	3	3		1	2,771			327	430	16	270	41	17	29
	285	271	209	174	215	11,460	165	14	2,334	966	243	2,703	306	108	143
1												22	2	1	
2									47			19	3	2	
3												30	4	2	
4									185			32	2		
5										67		6	1		2
6									65			35	4		
7	262	262	262	202	202		202	65	146			182	54	14	
8												30	8		
9	36	36	21	36	19		18	13		63	51	32	2	2	
10	80	47	17	47	47		47	39	322			100	15	9	
11												6	2	1	
12	227	227	152	131	227	4,459		79	77			516	53	1	
13	141	181	170	181			141		150			60	9	4	
14										6	13	10	2	1	
15									46			40	3		
16									120			18	1	1	
17												16	2	2	
18						455			103	109	106	44	6		
19									179	77	63	20	3		
20	505	372	372	407	407	234	383	133	983		498	234	39		
21												62	9	5	
22												10	2	1	
	1,251	1,125	994	1,004	902	5,148	791	329	2,423	322	731	1,524	226	46	2

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns	No. of schools	Teachers: Number of Teachers	Male	Female	Av. salary, male	Av. salary, female	Number who have ever attended a Model School in Ontario	Number who have ever attended a Normal School in Ontario	Number who have ever attended the Normal Coll. or F. of E. in Ontario	Number of University graduates	1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class	District
					$	$								
1 Alexandria ...	2	12	....	12	....	308	2	2	.....	....	1	3	1	...
2 Almonte	1	3	....	3	....	450	.....	2	1	....	....	2	....	...
3 Amherstburg .	2	8	....	8	....	300	4	4	.....	....	....	4	....	...
4 Arnprior.....	2	9	....	9	....	511	6	7	.....	....	....	7	....	...
5 Barrie	1	3	....	3	....	550	.....	2	.....	....	....	2	....	...
6 Bald River...	1	5	....	5	....	410	4	.....	.....	....	....	....	3	1
7 Bonfield	1	2	1	1	700	450	1	.....	.....	....	....	....	....	1
8 Brockville	1	8	....	8	....	337	1	7	.....	....	....	7	1	...
9 Cache Bay	1	2	....	2	....	550	2	.....	.....	....	....	....	2	...
10 Charlton	1	1	....	1	....	750	1	1	.....	....	....	1	....	...
11*Chelmsford ...	1	4	....	4	....	369	.....	1	.....	....	....	1	....	...
12 Cobalt	2	13	....	13	....	667	2	5	.....	....	....	5	2	...
13 Cobourg	1	4	....	4	....	425	.....	3	.....	....	....	3	....	...
14 Cochrane.....	1	5	....	5	....	400	.....	.....	.....	....	....	....	....	...
15 Collingwood ..	1	2	....	2	....	750	.....	2	.....	....	....	2	....	...
16 Cornwall	4	19	4	15	550	415	5	14	.....	....	....	12	2	...
17 Dundas	1	3	....	3	....	380	2	1	.....	....	....	1	....	...
18 Eastview	1	11	1	10	700	385	5	.....	.....	....	....	....	5	1
19 Ford	2	8	....	8	....	344	6	1	.....	....	....	1	2	...
20 Fort Frances..	1	4	....	4	....	425	.....	.....	.....	....	....	....	....	...
21 Goderich	1	2	....	2	....	375	.....	2	.....	....	...	2	....	...
22 Hanover.....	1	2	....	2	....	600	.....	2	.....	....	....	2	....	...
23*Haileybury ...	1	6	....	6	....	608	.....	3	.....	....	....	3	....	...
24*Hawkesbury ..	3	24	6	18	450	239	6	1	.....	....	....	1	5	1
25 Ingersoll	1	3	....	3	....	383	1	2	.....	....	....	2	....	...
26 Kearney	1	1	....	1	....	550	.....	1	.....	....	....	1	....	...
27 Keewatin.....	1	1	....	1	....	600	1	.....	.....	....	....	....	....	1
28 Kenora	1	5	....	5	....	376	.....	.....	.....	....	....	....	....	...
29 Lindsay	2	7	1	6	1125	433	.....	7	.....	....	....	7	....	...
30 Little Current	1	1	....	1	....	800	1	1	.....	....	....	1	....	...
31 Massey	1	2	....	2	....	575	1	.....	.....	....	....	....	1	...
32 Mattawa	1	6	....	6	....	467	3	1	.....	....	....	1	4	...
33 Merritton	1	2	....	2	....	625	.....	2	.....	....	....	2	....	...
34 Mount Forest .	1	2	....	2	....	475	.....	1	.....	....	....	1	....	...
35 New Liskeard	1	1	....	1	....	700	.....	1	.....	....	....	1	....	...
36 Newmarket...	1	1	....	1	....	725	.....	1	.....	....	....	1	....	...
37 North Bay....	3	18	....	18	....	644	5	13	.....	....	....	13	4	1
38 Oakville	1	1	....	1	....	600	.....	.....	.....	1	....	1	....	...
39 Orillia	1	4	....	4	....	300	.....	3	.....	....	....	2	....	...
40 Oshawa	1	3	....	3	....	500	3	.....	.....	....	....	....	....	...
41 Owen Sound ..	1	4	....	4	....	350	.....	3	.....	1	....	3	....	...
42 Paris	1	2	....	2	....	600	1	1	.....	....	....	1	....	...
43 Parkhill	1	1	....	1	....	600	.....	1	.....	....	....	1	....	...
44 Pembroke.....	1	13	....	13	....	562	1	7	1	....	1	9	1	...
45 Perth	1	4	....	4	....	410	.....	4	.....	....	....	4	....	...
46 Picton	1	1	....	1	....	600	.....	1	.....	....	....	1	....	...
47 Prescott	1	4	....	4	....	500	3	2	.....	....	....	3	....	...
48 Preston.....	1	5	....	5	....	350	1	2	.....	....	....	2	1	...
49 Rainy River ..	1	1	....	1	....	700	.....	.....	.....	....	....	....	....	...
50 Renfrew	1	9	....	9	....	422	1	5	.....	....	....	5	1	...
51*Rockland	2	15	....	15	....	260	4	.....	.....	....	....	....	8	3
52 St. Mary's	1	2	....	2	....	400	.....	.....	.....	....	....	....	....	...
53 Sandwich.....	2	7	....	7	....	294	2	5	.....	....	....	5	2	...

*No report received for 1919.

SEPARATE SCHOOLS—Continued

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.—Continued

	Kindergarten Primary	Permanent Ungraded	Temporary	Number of Pupils	Boys	Girls	Average daily attendance	Percentage of average to total attendance	Kindergarten-Primary	First Reader, Part I, or Primer	First Reader, Part II, or 1st Book	Second Book	Third Book	Fourth Book	Beyond 4th Book
1	....	4	3	605	269	336	435	72	...	206	45	153	118	83	.....
2	....	1	.....	106	45	61	93	88	....	22	20	19	28	17	.....
3	....	4	.....	336	131	205	209	62	....	103	38	45	66	48	36
4	....	2	.....	542	267	275	330	61	....	209	58	98	116	61	.....
5	....	1	.....	139	76	63	100	72	....	22	17	27	32	41	.....
6	....	.....	1	275	123	152	183	67	....	164	27	43	13	28	.....
7	....	.....	1	110	48	62	59	54	....	73	6	21	8	2	.....
8	....	.....	.....	280	133	147	226	81	....	56	38	57	66	46	17
9	....	.....	.....	120	66	54	79	66	43	35	12	15	10	5	.....
10	....	.....	.....	55	23	32	40	73	....	5	18	18	9	5	.....
11	....	1	2	180	78	102	117	65	....	40	33	43	41	21	2
12	....	.....	6	648	357	291	340	52	....	344	94	97	79	34	.....
13	....	1	.....	137	71	66	107	78	....	22	22	28	33	32	.....
14	....	.....	5	250	117	133	193	77	20	118	31	37	34	10	.....
15	....	.....	.....	105	51	54	67	64	....	34	15	12	24	22	.....
16	....	4	1	1,055	483	572	765	73	....	364	218	248	151	74	.....
17	....	2	.....	131	67	64	89	68	....	48	19	17	20	27	.....
18	....	.....	5	612	267	345	471	77	....	212	212	122	41	25	.....
19	....	2	3	482	236	246	308	64	....	209	49	97	88	39	.....
20	....	.....	4	174	82	92	121	69	24	24	20	48	28	30	.....
21	....	.....	.....	81	43	38	61	75	....	13	10	15	23	20	.....
22	....	.....	.....	92	46	46	66	72	....	19	19	6	38	10	.....
23	....	.....	3	344	185	159	169	49	....	98	69	97	47	33	.....
24	....	.....	17	1,137	526	611	668	59	....	374	293	266	155	34	15
25	....	1	.....	117	52	65	91	78	....	25	16	14	35	27	.....
26	....	.....	.....	43	25	18	28	65	....	9	5	....	20	9	.....
27	....	.....	.....	38	20	18	27	71	....	21	1	4	7	5	.....
28	....	.....	5	224	107	117	142	63	....	80	16	52	49	27	.....
29	....	.....	.....	314	154	160	237	75	....	71	38	64	64	77	.....
30	....	.....	.....	43	21	22	34	79	....	16	9	7	3	8	.....
31	....	.....	1	100	44	56	45	45	10	39	10	20	13	8	.....
32	....	1	.....	324	156	168	193	60	....	72	89	39	74	43	7
33	....	.....	.....	70	40	30	49	70	....	17	7	12	18	16	.....
34	....	1	.....	77	36	41	60	78	....	16	7	16	22	16	.....
35	....	.....	.....	68	35	33	29	43	....	31	2	10	17	8	.....
36	....	.....	.....	76	43	33	58	76	....	22	17	12	12	13	.....
37	....	.....	.....	1,031	498	533	679	66	....	337	160	205	176	153	.....
38	....	.....	.....	44	19	25	26	59	....	10	11	5	6	12	.....
39	1	1	.....	180	86	94	115	64	....	35	37	40	34	34	.....
40	....	3	.....	195	110	85	126	65	....	66	30	29	22	48	.....
41	....	1	.....	178	96	82	130	73	....	24	23	41	51	39	.....
42	....	1	.....	75	43	32	51	68	....	26	9	8	20	12	.....
43	....	.....	.....	33	22	11	20	61	..	6	2	8	6	11	.....
44	....	2	.....	650	331	319	427	66	....	162	112	132	142	102	.....
45	....	.....	.....	195	94	101	152	78	....	30	25	45	49	46	.....
46	....	.....	.....	31	12	19	20	65	....	10	3	3	6	9	.....
47	....	1	.....	135	79	56	106	79	....	28	17	29	30	31	.....
48	....	2	.....	246	113	133	185	75	....	61	33	35	64	53	.....
49	....	.....	1	44	21	23	34	77	16	10	9	....	5	4	.....
50	....	3	.....	491	244	247	353	72	....	201	55	46	98	91	.....
51	....	.....	4	922	491	431	575	62	....	417	262	142	77	24	.....
52	....	2	.....	49	23	26	37	76	....	3	14	6	13	13	.....
53	....	.....	.....	391	213	178	227	58	....	135	67	120	48	21	.....

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns—Con.	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping
1 Alexandria ...	605	605	605	398	398	83	201	201	398	605	605	....
2 Almonte	106	84	106	84	84	29	50	64	84	106	106	....
3 Amherstburg .	336	336	336	336	336	84	150	150	336	336	336	10
4 Arnprior.....	542	333	542	542	542	61	177	275	542	542	542	....
5 Barrie.....	139	117	139	139	139	41	73	100	139	139	139	....
6 Blind River...	275	275	275	275	275	41	28	41	275	275	275	....
7 Bonfield	37	37	110	110	110	2	2	31	110	110	110	....
8 Brockville	280	280	280	280	280	63	111	169	280	280	280	....
9 Cache Bay....	120	120	120	42	120	5	15	15	120	120	120	....
10 Charlton	55	55	55	55	55	14	14	14	55	55	55	....
11 Chelmsford ...	180	180	180	180	180	107	25	180	180	180	180	23
12 Cobalt.....	648	497	648	497	420	65	192	305	648	648	648	....
13 Cobourg	137	137	137	137	137	32	65	93	137	137	137	....
14 Cochrane.....	170	250	250	210	170	170	34	72	170	170	250	....
15 Collingwood...	105	71	105	105	105	22	46	58	105	105	105	....
16 Cornwall	1,055	1,055	1,055	1,055	1,055	74	691	691	1,055	1,055	1,055	....
17 Dundas	131	131	131	131	131	27	47	64	131	131	131	....
18 Eastview.....	612	612	612	612	612	66	160	400	612	612	612	20
19 Ford	482	273	482	482	482	39	62	181	482	482	482	....
20 Fort Frances..	174	174	174	174	174	47	47	96	174	174	174	....
21 Goderich.....	81	68	81	81	81	20	43	58	81	81	81	....
22 Hanover	92	73	92	92	92	10	48	54	92	92	92	....
23 Haileybury ...	256	256	344	256	344	33	75	256	256	344	344	....
24 Hawkesbury ..	1,137	1,137	1,137	1,137	1,137	49	49	529	1,137	1,137	1,137	....
25 Ingersoll	117	117	117	117	117	27	27	62	117	117	117	....
26 Kearney.....	43	43	43	43	43	9	29	29	43	43	43	....
27 Keewatin	38	38	38	38	38	5	7	16	38	38	38	....
28 Kenora	224	224	224	224	224	27	76	128	224	224	224	....
29 Lindsay	314	314	314	314	314	77	141	176	314	314	314	....
30 Little Current	43	43	43	43	43	8	3	8	43	43	43	....
31 Massey	90	75	.....	41	41	51	21	41	21	21	.....	....
32 Mattawa	324	324	324	324	324	50	324	324	324	324	324	6
33 Merritton ...	70	70	70	70	70	16	53	53	70	70	70	....
34 Mount Forest .	77	61	77	77	77	16	38	54	77	77	77	....
35 New Liskeard.	68	68	68	68	68	8	19	4	68	68	68	....
36 Newmarket ...	76	54	76	76	76	13	25	37	76	76	76	....
37 North Bay....	1,031	1,031	1,031	1,031	1,031	153	329	329	1,031	1,031	1,031	....
38 Oakville	44	44	44	44	44	18	18	44	44	44	44	....
39 Orillia.....	180	180	180	180	180	34	68	68	180	180	180	....
40 Oshawa	195	195	195	195	195	48	70	99	195	195	195	....
41 Owen Sound ..	178	154	178	178	178	39	90	131	178	178	178	....
42 Paris	75	75	75	75	75	12	32	40	75	75	75	....
43 Parkhill.....	33	27	33	33	33	11	17	25	33	33	33	....
44 Pembroke	650	650	650	650	650	102	64	102	650	650	650	....
45 Perth	195	195	195	195	195	46	95	95	195	195	195	....
46 Picton.....	31	31	31	31	31	9	15	15	31	31	31	....
47 Prescott.....	135	135	135	135	135	31	61	61	135	135	135	....
48 Preston	246	185	246	246	246	53	117	152	246	246	246	....
49 Rainy River ..	44	44	44	44	44	6	6	6	44	44	44	....
50 Renfrew.....	491	491	491	491	491	91	160	136	491	491	491	....
51 Rockland	922	922	922	86	922	922	50	922	922	922	922	....
52 St. Mary's....	49	46	49	49	49	13	26	32	49	49	49	....
53 Sandwich.....	391	256	391	256	256	21	21	69	391	391	391	....

SEPARATE SCHOOLS—Continued

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.—Continued

	Arithmetic and Mensuration	Algebra	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, inclusive)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science	Maps, Globes and Prizes: Number of Maps	Number of Globes	Number of Schools giving Prizes	Number of Trees planted on Arbor Day
1												14	2		
2												14	1		
3	18	13	4	12	12	324	12	10	108			24	1	2	
4												20	2		
5												33	3		
6						213			28	28		16	2		
7						73						11	1	1	
8												21	3	1	
9						120						9	2		
10												10	1		
11	2	2			2	172	2	2		180		12	2	1	
12						348						27	5		
13												16	1	1	
14						210			50			14	2		
15									46	22	24	22	2	1	
16						393				364	40	50	4		
17												9	2		
18						612						12	2	1	
19						373			46			6	1	1	
20												5	1	1	
21												14	2	1	
22									48			6	1		
23						173				344		14	2		
24	15				15	1,096	15					50	7		
25									46			12	1	1	
26												8	1		
27						7						5	1	1	
28						190						15	1		
29												20	2		
30									43			8		1	34
31						70						6	1		
32	6	1	1			200	7					25	1		
33												11	1		
34												16	1		
35									25			5	1	1	
36												9	1		
37						310				337	79	24	2		
38									23			4	1	1	
39									68			19	2	1	
40												10	1		
41									90	139	107	15	2	1	
42									32			8	1		
43									17			9	2		
44						150						23	2	1	
45												8	1		
46												8	1		
47												15	1		
48										246		11	1	1	
49						28						2	1	1	
50												17	2	1	
51						920						32	9		
52												10	1		
53						277			80			15	1		

ROMAN CATHOLIC

11. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns—Concluded	Teachers: No. of Schools	Number of Teachers	Male	Female	Av. salary, male	Av. salary, female	Number who have ever attended a Model School in Ontario	Number who have ever attended a Normal School in Ontario	Number who have ever attended the Normal Coll. or F. of E. in Ontario	Number of University Graduates	1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class	District
					$	$								
54 Seaforth...	1	2	....	2	...	600	.....	1	1	1	1	1	.....	....
55 Smith's Falls.....	1	5	....	5	...	325	.....	4	.....	....	....	4	.....	....
56 Sturgeon Falls	1	11	....	11	...	398	9	.....	.....	....	....	.....	7	2
57 Sudbury ..	3	20	....	20	...	700	11	8	.....	....	....	8	5	3
58 Thorold ...	1	6	....	6	...	567	3	2	1	....	1	2	.....	....
59 Tilbury....	1	5	....	5	...	360	3	2	.....	....	....	2	1	....
60 Timmins ..	1	8	....	8	...	737	6	2	.....	....	....	2	3	....
61 Trenton ...	1	4	....	4	...	437	.....	4	.....	....	....	4	.....	....
62 Vankleek Hill.....	1	5	....	5	...	300	4	1	.....	....	....	1	.....	1
63 Walkerton .	1	4	....	4	...	325	1	.....	.....	....	....	.....	1	....
64 Walkerville	1	3	....	3	...	250	1	1	1	1	1	1	.....	....
65 Wallaceb'rg	1	6	....	6	...	292	1	3	.....	....	....	3	.....	....
66 Waterloo ..	1	6	....	6	...	525	.....	1	.....	....	....	1	.....	....
67 Weston....	1	1	....	1	...	750	.....	1	.....	....	....	1	.....	....
68 Whitby....	1	1	....	1	...	700	.....	1	.....	....	....	1	.....	....
Totals.....	85	373	13	360	571	454	114	155	5	4	5	157	62	15
Totals														
1 Rur'l Schools	329	443	10	433	690	532	168	150	18	1	20	144	137	25
2 Cities	128	732	72	660	813	500	131	441	42	10	42	433	86	6
3 Towns	85	373	13	360	571	454	114	155	5	4	5	157	62	15
4 Villages	17	38	....	38	...	431	9	19	2	....	2	18	4	....
5 Gd. Totals, 1919.....	559	1586	95	1491	767	497	422	765	67	15	69	752	289	46
6 Gd. Totals, 1918.....	559	1526	84	1442	687	464	382	721	70	14	70	713	264	52
7 Increases ...	...	60	11	49	80	33	40	44	.....	1	....	39	25	....
8 Decreases...	...	.....	....	.....	...	...	.....	.....	3	....	1	.....	.....	6
9 Percentages.	...	.....	5.98	94.01	...	...	26.60	48.23	4.22	.94	4.35	47.41	18.22	2.90

SEPARATE SCHOOLS—Continued

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.—Continued

	Kindergarten-Primary	Permanent Ungraded	Temporary	Number of Pupils	Boys	Girls	Average daily attendance	Percentage of average to total attendance	Kindergarten-Primary	First Reader, Part I, or Primer	First Reader, Part II, or 1st Book	Second Book	Third Book	Fourth Book	Beyond 4th Book
54	...	.....	.....	88	55	33	63	72	....	20	16	16	20	16	....
55	...	1	.....	257	124	133	177	69	....	62	48	51	51	45	....
56	...	.....	2	552	279	273	502	91	....	225	124	109	50	44	....
57	...	2	2	1,006	476	530	792	79	....	272	212	229	209	84	....
58	...	3	.....	329	164	165	230	70	....	70	97	57	47	58	....
59	...	.....	2	256	119	137	183	71	....	87	29	48	44	48	....
60	...	.....	3	507	242	265	222	44	....	212	110	84	62	39	....
61	...	.....	.....	240	125	115	149	62	....	80	28	43	45	44	....
62	...	3	.....	245	96	149	143	58	....	66	44	53	36	46	....
63	...	3	.....	183	109	74	141	77	....	23	30	42	47	41	....
64	...	.....	1	171	95	76	105	61	....	59	18	28	38	28	....
65	...	1	2	337	158	179	238	71	....	119	58	57	58	45	....
66	...	5	.....	300	136	164	225	75	....	58	53	58	71	60	....
67	...	.....	.....	79	38	41	44	56	....	27	9	15	18	10	....
68	...	.....	.....	45	21	24	41	91	....	10	8	6	10	11	....
	1	59	74	18,975	9,255	9,720	12,807	67.49	113	6,184	3,351	3,669	3,255	2,326	77
1	...	14	103	17,746	8,821	8,925	10,610	59.78	833	5,711	2,928	3,051	2,725	2,145	353
2	11	102	52	36,487	18,256	18,231	24,725	67.76	812	8,377	6,396	7,233	6,967	5,494	1208
3	1	59	74	18,975	9,255	9,720	12,807	67.49	113	6,184	3,351	3,669	3,255	2,326	77
4	...	10	4	1,625	800	825	1,147	70.58	....	414	226	279	353	317	36
5	12	185	233	74,833	37,132	37,701	49,289	65.86	1758	20,686	12,901	14,232	13,300	10,282	1674
6	1	203	223	71,302	35,301	36,001	40,535	56.85	533	20,588	11,862	14,329	12,762	9,595	1633
7	11	.....	10	3,531	1,831	1,700	8,754	9.01	1225	98	1,039	.....	538	687	41
8	...	18	.....	.....	.....	.....	.....	.....	....	.....	.....	97	.....	.....	....
9	.75	11.66	14.69	.....	49.61	50.38	65.86	.....	2.35	27.64	17.24	19.02	17.77	13.74	2.23

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns—Concluded	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture
54 Seaforth.....	88	68	88	88	88	16	36	52	88	88	88
55 Smith's Falls.	257	257	257	257	257	45	96	147	257	257	257
56 Sturgeon Falls	552	327	552	94	552	44	44	253	252	252	252
57 Sudbury	1,006	1,006	1,006	1,006	1,006	84	293	522	1,006	1,006	1,006
58 Thorold	329	329	329	329	329	58	58	105	329	329	329
59 Tilbury.....	256	256	256	256	256	48	48	92	191	256	256
60 Timmins	507	507	507	507	507	39	101	172	507	507	507
61 Trenton	240	240	240	240	240	44	89	132	240	240	240
62 Vankleek Hill.	245	179	245	245	245	46	82	135	245	245	245
63 Walkerton	183	160	183	183	183	41	88	130	183	183	183
64 Walkerville...	171	171	171	171	171	68	30	49	171	171	171
65 Wallaceburg ..	337	337	337	337	337	45	160	160	337	337	337
66 Waterloo	300	242	300	300	300	60	131	189	300	300	300
67 Weston.....	79	79	79	79	79	10	41	41	79	79	79
68 Whitby	45	45	45	45	45	11	21	21	45	45	45
Totals.....	18,724	17,451	18,875	16,901	18,244	3,759	5,725	9,555	18,134	18,516	18,575
Totals											
1 Rural Schools..	14,968	12,989	13,741	12,123	14,508	3,162	4,680	9,033	13,692	12,586	15,073
2 Cities.....	36,402	35,173	36,467	35,712	35,712	17,264	12,830	21,959	36,109	35,334	36,487
3 Towns	18,724	17,451	18,875	16,901	18,244	3,759	5,725	9,555	18,134	18,516	18,575
4 Villages	1,583	1,562	1,583	1,590	1,625	398	600	914	1,615	1,573	1,625
5 Gd. Totals, 1919	71,677	67,175	70,666	66,326	70,089	24,583	23,835	41,461	69,550	68,009	71,760
6 Gd. Totals, 1918	69,447	61,971	66,127	64,638	67,056	16,268	23,843	35,462	64,876	65,815	67,161
7 Increases	2,230	5,204	4,539	1,688	3,033	8,315	.....	5,999	4,674	2,194	4,599
8 Decreases.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....
9 Percentages ...	95.78	89.76	94.43	88.63	93.66	32.85	31.85	55.40	92.94	90.88	95.89

SEPARATE SCHOOLS—Concluded

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.—Concluded

	Bookkeeping	Arithmetic and Mensuration	Algebra	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, inclusive)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science	Maps, Globes, Prizes: Number of Maps	Maps, Globes, Prizes: Number of Globes	Maps, Globes, Prizes: Number of Schools giving Prizes	Number of Trees planted on Arbor Day
54	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1	.....	....
55	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	54	10	2	.....	....
56	...	.....	.....	.....	.....	.....	484	.....	.....	.....	.....	.....	9	2	.....	7
57	...	.....	.....	.....	.....	.....	695	.....	.....	.....	.....	.....	40	3	1	10
58	...	.....	.....	.....	.....	.....	.....	.....	.....	58	.....	.....	8	1	1	....
59	...	.....	.....	.....	.....	.....	240	.....	.....	92	.....	.....	8	3	.....	....
60	...	.....	.....	.....	.....	.....	422	.....	.....	101	507	.....	18	2	.....	....
61	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	1	.....	....
62	...	.....	.....	.....	.....	.....	241	.....	5	.....	163	.....	16	1	1	....
63	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	3	1	....
64	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	2	.....	....
65	...	.....	.....	.....	.....	.....	.....	.....	.....	58	.....	.....	10	2	1	....
66	...	.....	.....	.....	.....	.....	.....	.....	.....	131	13	18	14	2	1	....
67	...	.....	.....	.....	.....	.....	.....	.....	.....	41	.....	.....	8	1	1	....
68	...	.....	.....	.....	.....	.....	.....	.....	.....	21	.....	.....	10	1	1	....
	59	41	16	5	12	29	8,341	36	17	1,252	2,385	322	1,004	122	30	51
1	188	285	271	209	174	215	11,460	165	14	2,334	966	243	2,703	306	108	143
2	726	1,251	1,125	994	1,004	902	5,148	791	329	2,423	322	731	1,524	226	46	2
3	59	41	16	5	12	29	8,341	36	17	1,252	2,385	322	1,004	122	30	51
4	10	36	36	26	36	26	469	26	10	306	.....	.....	170	21	5	25
5	983	1,613	1,448	1,234	1,226	1,172	25,418	1,018	370	6,315	3,673	1,296	5,401	675	189	221
6	942	1,454	1,270	1,015	1,008	1,246	24,984	1,103	350	4,045	6,892	1,664	5,780	719	153	194
7	41	159	178	219	218	.....	434	.....	20	2,270	.....	.....	.....	.....	36	27
8	....	.....	.....	.....	.....	74	.....	85	.....	.....	3,219	368	379	44	.....	....
9	1.31	2.15	1.93	1.64	1.63	1.56	33.96	1.36	.49	8.43	4.90	1.73	* 9.66	*1.20	33.63	....

* To each School.

CONTINUATION

I. TABLE H—FINAN-

Continuation Schools	Receipts						Ex-
	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees	Balances and other sources	Total Receipts	Teachers' Salaries
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1 Acton	543 46	543 46	2,400 00	292 50	149 20	3,928 62	2,550 00
2 Agincourt	275 30	367 06	800 00	145 00	788 87	2,376 23	1,040 00
3 Alvinston	542 07	250 00	1,296 26	366 00	372 00	2,826 33	2,291 13
4 Arkona	81 25	231 25	154 00	72 00	13 07	551 57	434 12
5 Ayr	541 19	541 19	1,088 66	267 00	813 88	3,251 92	2,228 46
6 Bancroft	2,000 00	1,629 95	.....	.....	18 82	3,648 77	2,311 88
7 Bath	470 95	720 95	850 00	80 00	372 68	2,494 58	1,745 00
8 Beaverton	550 20	650 20	1,336 23	406 00	25 06	2,967 69	2,220 00
9 Beeton	493 37	1,148 74	1,500 00	322 00	195 33	3,659 44	2,055 50
10 Belmont	557 13	802 75	972 37	502 00	139 58	2,973 83	2,355 84
11 Blenheim	620 00	820 00	1,531 36	440 50	51 30	3,463 16	2,052 00
12 Blind River	937 20	.....	1,250 84	143 00	8 96	2,340 00	1,990 00
13 Blyth	372 05	744 10	600 00	266 25	127 80	2,110 20	1,577 50
14 Bothwell	492 38	742 38	1,225 00	195 00	19 00	2,673 76	1,980 00
15 Bowesville	255 50	235 32	700 00	35 30	216 90	1,423 02	870 00
16 Bridgeburg	581 84	681 84	4,110 44	657 00	27 00	6,058 12	3,040 00
17 Bruce Mines	1,064 60	.....	1,400 00	61 00	557 54	3,083 14	2,260 00
18 Brussels	547 03	1,094 06	1,300 00	622 00	1,079 57	4,642 66	2,454 00
19 Burk's Falls	1,120 60	.....	1,055 00	296 00	1,492 59	3,964 19	2,017 77
20 Cannington	549 15	649 15	1,890 79	636 75	.....	3,725 84	2,220 00
21 Cardinal	484 10	634 10	857 40	381 00	.....	2,356 60	1,800 00
22 Carp	507 00	507 00	1,200 00	495 00	495 80	3,204 80	2,085 00
23 Chapleau	1,041 64	.....	3,600 00	374 25	1,139 09	6,154 98	2,666 70
24 Claremont	474 15	574 15	729 37	476 78	14 75	2,269 20	1,875 00
25 Clifford	502 16	702 16	1,118 46	243 35	770 64	3,336 77	1,825 50
26 Cochrane	543 10	.....	392 57	.....	89 90	1,025 57	940 00
27 Coldwater	545 75	1,091 50	1,650 00	287 00	106 08	3,680 33	1,991 87
28 Comber	488 23	688 23	800 00	184 50	739 34	2,900 30	1,852 64
29 Cookstown	550 89	1,286 78	500 00	377 00	33 30	2,747 97	2,060 00
30 Creemore	518 23	1,205 46	731 57	314 00	28 00	2,797 26	2,010 00
31 Delaware	263 93	539 71	756 82	263 75	736 63	2,540 84	1,400 00
32 Delhi	274 84	424 84	554 66	99 00	4 07	1,357 41	1,040 00
33 Drayton	1,732 64	762 76	1,508 17	935 45	.....	4,939 02	3,198 00
34 Dresden	493 25	743 25	1,080 00	200 00	13 81	2,530 31	1,680 00
35 Drumbo	361 68	511 68	1,378 25	73 00	314 67	2,639 28	1,471 11
36 Dryden	527 22	.....	1,916 08	.....	.....	2,443 30	1,786 50
37 Eganville	522 90	522 90	1,165 51	108 18	41 56	2,361 05	1,927 25
38 Eganville(R.C.S.S)	458 65	458 65	635 30	92 00	817 09	2,461 69	1,500 00
39 Elmira	563 18	563 18	1,500 00	434 00	212 00	3,272 36	2,458 28
40 Elmvale	549 29	1,290 58	1,666 67	210 75	437 31	4,154 60	2,120 00
41 Ennismore	501 45	501 45	500 00	470 00	214 84	2,187 74	1,890 00
42 Erin	377 00	577 00	1,000 00	332 00	.....	2,286 00	1,550 00
43 Espanola	.....	.....	.....	.....	18044 96	18,044 96	450 00
44 Fenelon Falls	531 15	531 15	1,307 00	130 00	32 35	2,531 65	2,030 07
45 Finch	575 05	862 57	870 00	345 35	932 79	3,585 76	2,108 46
46 Fingal	515 98	1,289 95	500 00	54 00	739 53	3,099 46	2,020 00
47 Frankford	510 35	954 62	4,160 58	20 00	4,206 55	9,852 10	3,915 00
48 Gore Bay	1,049 80	.....	1,304 16	306 25	5 85	2,666 06	2,085 00
49 Grand Valley	513 88	908 88	576 29	363 83	15 00	2,377 88	1,589 63
50 Hanover	571 48	857 22	1,363 94	485 50	91 00	3,369 14	2,504 42

SCHOOLS

CIAL STATEMENT

penditure

	Buildings, Sites and all permanent improvements	Repairs to school accommodations	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	School books, stationery, fuel, examinations and other expenses	Total Expenditure	Charges per year for Tuition
	$ c.	$ c.	$ c.	$ c.	$ c.	
1	806 76	35 00	112 65	413 50	3,917 91	Res. $5 ; non-res. $7.
2	.....	78 59	74 13	493 04	1,685 76	$10.
3	112 45	.....	.....	422 75	2,826 33	$10.
4	.....	.....	21 49	75 10	530 71	$10.
5	.....	.....	78 24	319 77	2,626 47	$10.
6	680 00	.....	25 50	574 99	3,592 37	Free.
7	.....	25 00	50 00	257 50	2,077 50	Res. free ; non-res. $10.
8	25 24	27 59	70 42	624 44	2,967 69	$10.
9	270 65	.....	.....	411 14	2,737 29	Res. 1st year free ; others $10.
10	138 00	.....	249 00	213 11	2,955 95	$10.
11	903 66	35 00	17 86	454 64	3,463 16	Res. free ; non-res. $25.
12	.....	20 00	100 00	230 00	2,340 00	$10.
13	.....	43 13	81 68	280 24	1,982 55	$10.
14	.....	38 47	66 56	390 59	2,475 62	Res. free ; non-res. $15.
15	135 32	.....	62 68	250 25	1,318 25	$5.
16	1,418 34	94 87	550 95	953 96	6,058 12	Res. free ; non-res. I $30, II $20.
17	11 20	.....	106 83	338 13	2,716 16	Res. free; non-res. $10.
18	.....	10 25	100 65	631 09	3,195 99	Res. I $5, II $7.50, III $10; non-res. $10.
19	1,216 08	.....	56 22	630 90	3,920 97	$10.
20	100 00	375 00	157 86	872 98	3,725 84	$15.
21	175 00	.....	.....	349 19	2,324 19	$10.
22	.....	.....	141 95	353 30	2,580 25	Res. $5 ; Tp. outside sec, $15; others $20.
23	122 56	.....	.....	2,994 36	5,783 62	F. I $10, II $15, III $20.
24	15 50	.....	36 59	342 11	2,269 20	Res. F. I free ; others $20.
25	.....	49 75	101 62	1,359 90	3,336 77	$10.
26	.....	.....	50 44	.....	990 44	Free.
27	447 80	63 70	69 69	1,024 08	3,597 14	$10.
28	.....	4 40	.....	31 23	1,888 27	$10.
29	63 62	.....	63 40	466 79	2,653 81	$7.50.
30	314 11	.....	72 18	400 97	2,797 26	$10.
31	237 48	45 50	.....	520 15	2,203 13	$10.
32	.....	98 46	77 26	141 69	1,357 41	Res. free ; non-res. $10.
33	218 50	175 00	337 65	1,009 87	4,939 02	Res. F. I fr., II $9, III $11.25; non-res. $13.50
34	.....	28 45	117 90	695 75	2,522 10	Res. lower school free, middle $2.50;
35	420 46	.....	.....	517 17	2,408 74	$5. [non-res. $10.
36	.....	168 95	27 30	460 55	2,443 30	Free.
37	.....	46 40	25 98	361 42	2,361 05	Res. free ; non-res. $10.
38	266 37	.....	121 57	278 38	2,166 32	Res. free ; non-res. $10.
39	121 32	.....	237 06	380 20	3,196 86	Res. F. I free ; others $10.
40	393 50	.....	152 18	1,170 36	3,836 04	Res. $5; non-res. $10.
41	.....	.....	67 55	210 50	2,168 05	$20.
42	.....	.....	79 00	583 00	2,212 00	Res. F. I free ; non-res. $5; all others $9.
43	16834 96	.....	350 78	.....	17,635 74	Free.
44	49 03	.....	57 60	394 95	2,531 65	Res. free ; non-res. $10.
45	162 83	.....	65 56	1,242 15	3,579 00	$10.
46	421 66	59 80	60 00	538 00	3,099 46	Res. free ; non-res. $10.
47	.....	.....	165 85	2,271 99	6,352 84	Res. and Hastings Co. free ; others $20.
48	.....	65 82	172 41	342 83	2,666 06	$10.
49	.....	.....	50 32	737 93	2,377 88	Res. F. I free ; all others $8.
50	155 18	29 90	100 18	479 70	3,269 38	Res F. I free ; all others $10.

CONTINUATION

I. TABLE H—FINAN-

Continuation Schools.—Con.	Receipts						Ex-
	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees	Balances and other sources	Total Receipts	Teachers' Salaries
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
51 Harrow	501 37	701 37	1,287 62	115 00	.....	2,605 36	1,965 00
52 Havelock	534 30	534 30	1,708 47	65 00	.....	2,842 07	2,359 62
53 Hepworth	.....	.....	115 70	52 00	500 00	667 70	301 60
54 Highgate	532 20	782 91	1,462 00	263 50	745 61	3,786 22	2,310 00
55 Huntsville	1,169 20	.....	2,936 72	175 00	141 59	4,422 51	3,527 00
56 Jarvis	278 38	478 38	486 82	105 50	5 92	1,355 00	1,120 00
57 Jockvale	232 55	232 55	300 00	9 50	231 53	1,006 13	510 00
58 Kars	278 60	278 60	1,085 10	27 00	200 00	1,869 30	1,298 83
59 Keewatin	1,095 74	.....	2,404 21	.....	31 50	3,531 45	2,680 00
60 Kenmore	482 90	482 60	1,102 15	501 00	25	2,568 90	1,950 00
61 Kinburn	377 05	377 05	1,000 00	243 00	667 67	2,664 77	1,430 00
62 Lakefield	552 35	552 35	2,050 00	.....	144 62	3,299 32	2,260 00
63 Lanark	475 40	752 42	1,000 00	194 00	1,200 19	3,622 01	1,845 00
64 Lansdowne	246 50	396 50	695 57	47 75	781 22	2,167 54	975 03
65 Lion's Head	.....	.....	541 48	.....	.....	541 48	355 00
66 Little Current	534 00	.....	971 62	72 00	3 92	1,581 54	1,140 00
67 Lucknow	544 55	1,289 00	1,250 00	550 00	236 71	3,870 26	2,290 00
68 Malakoff	207 25	.....	1,400 00	26 00	1,113 80	2,747 05	1,381 65
69 Manitowaning	508 00	.....	550 00	153 00	143 33	1,354 35	1,020 00
70 Manotick	227 75	227 75	505 74	119 50	5 28	1,086 02	865 50
71 Massey	542 90	.....	744 12	89 00	62 31	1,438 33	1,205 00
72 Maxville	522 55	783 82	800 00	478 00	94 51	2,678 88	1,940 00
73 Melbourne	515 11	954 27	660 00	259 00	165 85	2,554 23	1,928 93
74 Merlin	493 65	943 65	1,000 00	336 50	21 00	2,794 80	1,940 00
75 Merrickville	471 95	621 95	1,097 40	68 50	206 95	2,376 75	1,780 00
76 Metcalfe	479 20	479 20	850 00	189 00	124 54	2,121 94	1,833 72
77 Millbrook	475 35	825 35	1,200 00	.....	168 95	2,669 65	1,712 50
78 Milverton	.....	.....	800 00	140 00	.....	940 00	940 00
79 Mount Albert	534 95	913 26	682 03	264 00	41 00	2,435 24	2,010 00
80 Mount Brydges	255 30	255 30	5,898 93	121 50	104 81	6,635 84	820 00
81 Navan	359 70	659 70	948 00	92 00	1,938 39	3,997 79	1,455 00
82 New Hamburg	547 50	542 50	1,645 00	171 00	.....	2,906 00	2,395 00
83 New Liskeard	1,270 30	.....	2,700 00	115 00	459 94	4,545 24	2,500 00
84 New Toronto	362 61	483 48	1,621 95	92 00	24 36	2,584 40	2,330 00
85 North Augusta	476 30	626 30	800 00	134 00	64 56	2,101 16	1,920 00
86 North Gower	523 05	523 05	2,016 71	148 00	397 69	3,608 50	1,900 00
87 Norwich	544 90	694 90	2,009 09	354 55	1 82	3,605 26	2,110 00
88 Odessa	491 75	1,425 40	2,050 00	281 50	695 16	4,943 81	1,840 00
89 Oil Springs	478 78	250 00	1,434 00	207 30	.....	2,370 08	1,931 94
90 Orono	492 10	792 10	998 31	.....	1,083 34	3,365 85	1,864 12
91 Paisley	568 67	1,337 34	505 06	462 75	3 00	2,876 82	2,180 00
92 Pakenham	523 15	523 15	1,610 48	315 00	1,958 44	4,930 22	2,111 02
93 Palmerston	541 48	741 48	1,454 96	92 00	.....	2,829 92	2,280 00
94 Plattsville	522 10	522 10	1,239 00	219 00	11 93	2,514 13	1,950 00
95 Port Burwell	522 74	1,306 85	500 00	12 00	1,113 14	3,454 73	2,140 00
96 Port Colborne	568 45	668 45	2,000 00	.....	219 22	3,456 12	2,640 00
97 Port Credit	.....	.....	3,425 00	.....	800 00	4,225 00	1,465 00
98 Powassan	540 00	.....	500 00	199 50	385 14	1,624 64	1,000 00
99 Princeton	368 54	518 54	1,680 42	13 50	1,179 78	3,760 78	1,835 50

SCHOOLS—Continued

CIAL STATEMENT—Continued

penditure

	Buildings, Sites and all permanent improvements	Repairs to school accommodations	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	School books, stationery, fuel, examinations and other expenses	Total Expenditure	Charges per year for Tuition
	$ c.	$ c.	$ c.	$ c.	$ c.	
51	65 30	.....	88 66	486 40	2,605 36	Res. free; non-res. $10.
52	.....	.....	148 18	334 27	2,842 07	Res. F. I free. II & III $3; non-r. I $3. II & III $6.
53	30 00	.....	322 90	13 20	667 70	$10.
54	284 00	13 00	97 27	333 60	3,037 87	Res. F. I free. II & III $7.50; non-r. I $5. II & III $10.
55	188 31	.....	75 00	511 71	4,302 02	Res. F. I free. II $5; all others $10.
56	.....	25 00	60 00	150 00	1,355 00	Res. free; non-res. $7.50.
57	22 50	.....	14 58	321 24	868 32	Res. free; non-res. $5.
58	.....	.....	113 83	456 64	1,869 30	Res. free; non-res. $7.50.
59	7 30	150 31	65 34	628 50	3,531 45	Free.
60	.....	148 53	85 64	384 73	2,568 99	$12.50
61	25 00	.....	.....	819 78	2,274 78	Res. free; non-res. $20.
62	.....	20 00	200 00	796 75	3,276 75	Free.
63	.....	50 45	.....	347 33	2,242 78	Res. free; non-res. $10.
64	73 77	.....	93 10	230 00	1,371 90	Res. free; non-res. $5.
65	.....	.....	.....	186 48	541 48	Free.
66	120 15	27 35	74 45	219 59	1,581 54	Res. free; non-res. $15.
67	.....	65 00	110 00	710 00	3,175 00	Res. FI $5, II $7.50. III $10; non-r. $12.50
68	43 52	.....	33 55	1,162 38	2,621 10	Res. free; non-res. $10.
69	.....	29 13	19 38	198 78	1,267 29	$10.
70	.....	.....	.....	220 52	1,086 02	Res. free; non-res. $10.
71	.....	.....	.....	233 33	1,438 33	Res. $5; non-res. $10.
72	.....	.....	147 85	540 20	2,628 05	Res. $5; non-res. $10.
73	89 42	86 34	37 55	410 01	2,552 25	Res. free; non-res. $10.
74	174 44	22 50	52 31	584 16	2,773 41	$10.
75	.....	.....	201 84	194 91	2,176 75	Res. free; non-res. $7.50.
76	.....	.....	36 67	224 01	2,094 40	$10.
77	.....	19 00	328 88	458 70	2,519 08	Free.
78	.....	.....	.....	.....	949 00	Res. F.I $5; all others $10
79	.....	.....	82 45	313 88	2,406 33	$10.
80	5,411 20	.....	55 43	349 21	6,635 84	$7.
81	151 10	.....	51 07	403 13	2,060 30	Res. free; non-res. $10.
82	.....	.....	150 00	356 00	2,901 00	Res. free; non-res. $15.
83	18 48	22 86	123 87	1,771 46	4,436 67	Res. free; non-res. $15.
84	.....	.....	233 40	21 06	2,584 40	Res. $3; non-res. $10.
85	.....	.....	.....	152 96	2,072 96	Res. F.I free; all others $10.
86	41 00	340 00	168 00	617 34	3,066 34	Res. free; non-res. $10
87	.....	200 00	250 00	994 92	3,554 92	Res. $3; non-res. $6.
88	.....	18 03	50 99	241 55	2,159 57	Res. free; non-res. $10.
89	.....	27 45	80 44	330 25	2,379 08	Res. $5; non-res. $10.
90	.....	30 30	91 14	506 20	2,491 76	Free.
91	5 40	44 60	152 91	493 91	2,876 82	F's. I & II $7.50, III $12.50.
92	.....	40 05	59 03	435 45	2,645 55	$10.
93	163 50	24 00	80 42	240 00	2,787 92	Res. free; non-res. $5.
94	65 50	84 30	123 01	285 36	2,508 17	Res. $6; non-res. $12.
95	18 00	23 75	82 10	243 17	2,507 02	Res. free; non-res. $5.
96	.....	.....	.....	585 13	3,225 13	Free.
97	263 00	.....	615 41	330 00	2,673 41	Res. I free, II $9, III & IV $15; non-res. F. I $15, II $21, III $24, IV $30.
98	.....	15 00	76 39	180 00	1,271 39	Res. $10; non-res. $15.
99	135 00	60 60	147 50	387 21	2,565 81	Res. free; non-res. $4.50.

CONTINUATION

I. TABLE H—FINAN-

Continuation Schools —concluded	Receipts						Ex-
	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees	Balances and other sources	Total Receipts	Teachers' Salaries
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
100 Richard's Land'g	254 65	.....	1,350 00	63 50	663 58	2,331 73	950 00
101 Richmond.....	244 35	244 47	109 80	101 00	.....	699 62	539 90
102 Ridgeway	524 67	693 67	1,603 10	.....	34 00	2,855 44	2,680 00
103 Ripley.....	553 68	2,392 38	500 00	554 50	954 65	4,955 19	1,903 07
104 Rodney.....	547 76	1,369 40	570 46	31 00	488 39	3,007 01	2,187 30
105 Russell.....	513 15	813 15	500 00	.....	2,607 64	4,433 94	2,020 00
106 St. George	540 55	1,040 55	1,299 99	194 00	225 27	3,300 36	2,500 00
107 Schomberg.....	.....	356 27	502 51	69 75	267 20	1,195 73	1,000 00
108 Scotland	426 63	926 63	2,269 56	224 80	752 30	4,599 92	1,758 46
109 Southampton....	557 42	1,314 84	1,379 56	312 70	247 40	3,811 92	2,180 00
110 South Mountain.	460 55	690 82	7,500 00	92 00	8,019 27	16,762 64	1,685 25
111 South Porcupine.	545 10	.....	1,070 00	.....	628 26	2,243 36	1,040 00
112 Spencerville	476 95	626 95	809 00	236 00	465 65	2,605 55	1,790 00
113 Springfield	554 48	1,386 20	676 31	66 00	690 82	3,373 81	2,261 22
114 Stayner	526 28	1,245 06	.....	212 25	2,020 67	4,004 26	2,247 10
115 Stella	391 30	665 30	400 00	702 00	626 52	2,785 12	1,590 00
116 Stouffville	496 20	861 60	416 95	568 00	1 46	2,344 21	2,028 75
117 Sturgeon Falls .	577 20	.....	2,360 33	172 00	172 42	3,281 95	1,280 00
118 Sutton	510 90	881 20	1,008 00	370 30	294 60	3,065 00	1,865 00
119 Tamworth.....	512 10	762 10	793 60	330 00	510 44	2,908 24	1,950 00
120 Tara	555 25	1,310 50	747 80	346 00	5 38	2,964 93	2,220 00
121 Tavistock	549 63	699 63	2,131 95	202 50	1,683 67	5,267 38	2,255 00
122 Teeswater	508 15	1,216 30	1,000 00	417 00	1,245 84	4,387 29	2,089 78
123 Thamesville	533 91	783 91	1,600 00	208 00	164 42	3,290 24	1,787 00
124 Thessalon	1,086 10	.....	1,529 32	128 00	277 32	3,020 74	2,277 50
125 Thornbury	559 69	839 53	1,216 77	444 00	11 11	3,071 10	2,083 38
126 Thorndale	522 65	622 65	2,000 00	420 00	63 21	3,628 51	2,120 00
127 Tilbury.	472 82	722 82	887 33	290 00	1,311 77	3,684 74	1,830 00
128 Timmins	.....	.....	1,800 00	.....	.....	1,800 00	1,800 00
129 Tottenham.....	517 36	1,227 72	462 35	284 50	105 04	2,596 97	2,045 00
130 Warkworth	547 15	947 15	1,311 52	513 00	279 45	3,598 27	2,102 05
131 Webbwood	540 10	.....	842 57	.....	6 11	1,388 78	995 00
132 Westboro'	549 65	549 65	2,304 39	59 00	.....	3,462 69	2,512 13
133 West Lorne	544 61	1,361 53	1,098 39	.....	.....	3,004 53	1,898 25
134 Westmeath	272 50	272 50	641 73	148 00	.....	1,334 73	1,128 00
135 Westport	389 25	530 00	924 72	44 50	14 00	1,902 47	1,632 75
136 Westport(R.C.S.S)	339 10	339 10	800 00	23 00	552 36	2,053 56	1,165 00
137 Winona.....	272 88	741 13	1,120 34	.....	307 12	2,441 47	1,280 00
138 Wroxeter	485 62	971 24	454 70	206 25	37 77	2,155 58	1,911 04
1 Totals, 1919.....	70,355 75	84,726 04	174,381 46	29,468 14	79,960 12	438,891 51	253,653 52
2 Totals, 1918.....	71,879 03	76,215 55	152 831 74	26,953 72	58,064 60	385,944 64	234,975 68
3 Increases	.....	8,510 49	21,549 72	2,514 42	21,895 52	52,946 87	18,677 84
4 Decreases.....	1,523 28	.....	.....	.....	.....	.....	.....
5 Percentages.....	16.03	19.30	39.73	6.71	18.22	.....	65.26

SCHOOLS—Continued

CIAL STATEMENT—Concluded

penditure

	Buildings, Sites and all permanent improvements	Repairs to school accommodations	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	School books, stationery, fuel, examinations and other expenses	Total Expenditure	Charges per year for Tuition
	$ c.	$ c.	$ c.	$ c.	$ c.	
100	.....	2 10	13 23	170 44	1,135 77	Res. $7.50; non-res. $15.
101	.....	13 51	40 13	99 80	693 14	Res. $5; non-res. $10.
102	.....	.....	39 49	135 95	2,855 44	Free.
103	52 07	22 56	159 95	2,124 53	4,262 18	Res. $8; non-res. $10.
104	.....	166 00	56 19	131 13	2,540 62	Res. free; non-res. $10.
105	.....	.....	92 50	234 16	2,346 66	Free.
106	145 00	59 28	204 52	116 84	3,025 64	Res. free; non-res, $25.
107	.....	.....	19 73	176 00	1,195 73	F. I r. free, non-r. $5; others $10.
108	320 00	.....	68 88	712 68	2,860 02	$10.
109	.....	.....	.....	1,313 54	3,493 54	$8.
110	12,630 00	.....	200 00	653 00	15,168 25	Res. free; non-res. $5.
111	28 20	.....	47 18	324 91	1,440 29	Free.
112	.....	.....	47 17	266 52	2,103 69	$10.
113	56 79	.....	.....	514 95	2,832 96	Lower school free; M.S. $10.
114	.....	57 79	3 50	512 88	2,821 27	Res. $5; non-res. $10.
115	82 40	.....	24 23	254 51	1,951 14	$32.
116	.....	.....	35 49	279 97	2,344 21	$15.
117	139 86	318 31	.....	750 50	2,488 67	$10.
118	202 43	32 30	83 13	239 37	2,422 23	$10.
119	600 00	.....	.....	353 70	2,903 70	Res. free; non-res. $13.
120	99 81	.....	154 52	490 60	2,964 93	$10.
121	180 00	.....	.....	796 94	3,231 94	Res. $5; non-res. $10.
122	57 41	.....	112 00	402 46	2,661 65	$10.
123	.....	5 70	103 87	916 95	2,813 52	Res. free; non-res. $10.
124	144 57	.....	81 40	517 27	3,020 74	Res. free; non-res. $10.
125	56 92	90 68	121 30	718 82	3,071 10	Res. $5; non-res. $10.
126	350 90	29 75	37 82	563 44	3,101 91	$10.
127	1,319 72	.....	191 02	313 84	3,654 58	$10.
128	.....	.....	.....	.....	1,800 00	Free.
129	92 10	30 00	.....	375 24	2,542 34	Res. F. I free; all others $10.
130	.....	46 18	111 38	1,338 66	3,598 27	F's I & II $12; III $15.
131	53 31	.....	6 80	333 67	1,388 78	Free.
132	.....	29 45	.....	921 11	3,462 69	Res. free; non-res. $10.
133	.....	.....	201 61	861 49	2,961 35	Free.
134	.....	15 02	.....	191 71	1,334 73	Res. F I free; all others $10.
135	.....	.....	210 12	59 60	1,902 47	Res. free ; non-res. $5.
136	.....	20 00	43 94	320 88	1,549 82	Res. free; non-res. $10.
137	300 00	.....	.....	356 15	1,936 15	Free.
138	.....	.....	169 54	75 00	2,155 58	F. I $5, II $7.50, III $10.
1	50,544 96	4,145 01	12,545 92	67,811 20	388,700 61	58 free; 80 not free.
2	23,150 06	8,847 73	11,643 18	54,236 13	332,852 78	52 free; 84 not free.
3	27,394 90	.....	902 74	13,575 07	55,847 83	6 free.
4	.....	4,702 72	.....	.....	.....	4 not free.
5	13.00	1.06	3.23	17.44	.....	42.02 free; 57.97 not free.

Cost per pupil. enrolled attendance. $75.82; average attendance, $98.28

CONTINUATION

II. TABLE I—SCHOOLS UNDER PUBLIC SCHOOL

Continuation Schools	Schools under Public or Separate School Board	Value of General Library	Scientific Apparatus	Charts, Maps and Globes	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium, not including equipment	Museum	Aquarium or Herbarium
		$	$	$	$	$	$	$	$	$	$
1 Acton	1	317	392	36	35	....	38	12	.....	.....	.....
2 Agincourt	1	189	227	39	31	....	69	.....	.....	.....	.....
3 Alvinston	1	277	369	91	34	....	42	.....	.....	.....	.....
4 Arkona	1	161	169	25	25	....	11	9	.....	.....	.....
5 Ayr	....	270	405	58	49	....	32	.....	.....	.....	.....
6 Bancroft	1	217	262	56	28	....	36	.....	.....	.....	.....
7 Bath	1	211	269	61	39	....	21	.....	.....	.....	.....
8 Beaverton	1	220	372	73	48	....	124	50	.....	.....	.....
9 Beeton	1	253	412	52	34	....	40	.....	.....	.....	.....
10 Belmont	1	313	573	38	29	....	34	.....	.....	.....	.....
11 Blenheim	1	445	528	71	52	....	32	16	.....	.....	.....
12 Blind River	1	176	222	30	39	....	21	.....	.....	.....	.....
13 Blyth	1	188	323	81	38	....	27	.....	.....	.....	6
14 Bothwell	1	239	402	28	25	....	30	.....	.....	.....	.....
15 Bowesville	1	184	132	40	37	....	4	.....	.....	.....	.....
16 Bridgeburg	1	441	975	84	69	....	138	20	.....	.....	.....
17 Bruce Mines	1	109	429	55	42	....	21	.....	.....	.....	.....
18 Brussels	1	361	326	87	46	....	44	10	.....	.....	.....
19 Burk's Falls	1	272	354	101	54	....	37	46	.....	.....	.....
20 Cannington	1	246	495	28	54	....	12	66	.....	.....	7
21 Cardinal	1	294	313	69	70	....	71	30	.....	.....	.....
22 Carp	1	204	318	37	24	....	30	.....	.....	.....	.....
23 Chapleau	....	181	322	29	49	....	40	8	.....	.....	.....
24 Claremont	1	303	350	61	34	....	39	20	.....	.....	.....
25 Clifford	1	353	297	.....	46	100	43	7	.....	.....	.....
26 Cochrane	1	180	160	6	49	....	62	.....	.....	.....	.....
27 Coldwater	1	329	366	32	34	50	35	.....	.....	.....	.....
28 Comber	1	206	265	63	44	....	20	10	.....	.....	.....
29 Cookstown	1	304	451	31	56	....	30	.....	.....	.....	.....
30 Creemore	1	119	322	20	44	....	49	.....	.....	.....	.....
31 Delaware	1	164	196	45	40	....	39	11	.....	.....	.....
32 Delhi	1	189	239	67	49	....	43	.....	.....	.....	.....
33 Drayton	1	394	449	88	56	....	56	5	.....	.....	.....
34 Dresden	1	320	420	75	46	....	34	17	.....	.....	.....
35 Drumbo	1	210	244	54	57	....	13	.....	.....	.....	.....
36 Dryden	1	139	204	.....	43	....	53	9	.....	.....	.....
37 Eganville	1	235	349	20	23	....	32	15	.....	.....	.....
38 Eganville (R.C.S.S.)	1	419	350	65	58	....	58	5	3,000	18	3
39 Elmira	1	301	392	54	45	....	42	34	.....	.....	.....
40 Elmvale	1	126	439	66	68	....	19	14	.....	.....	.....
41 Ennismore	1	270	321	30	52	....	28	.....	.....	.....	.....
42 Erin	1	254	319	40	55	....	12	.....	.....	.....	.....
43 Espanola	....	80	278	42	30	....	34	.....	.....	.....	.....
44 Fenelon Falls	1	272	351	50	48	....	42	.....	.....	.....	.....
45 Finch	1	386	572	31	61	....	54	10	.....	.....	.....
46 Fingal	1	138	334	53	41	....	33	22	.....	.....	.....
47 Frankford	1	257	391	53	49	....	50	14	.....	.....	.....
48 Gore Bay	1	251	362	70	65	....	18	.....	.....	.....	.....
49 Grand Valley	1	287	529	64	25	....	30	73	.....	.....	.....
50 Hanover	1	396	491	48	51	....	44	22	.....	.....	.....

SCHOOLS—Continued

BOARD, VALUE OF EQUIPMENT, ETC.

	Equipment		Religious and other Exercises						Destination of Pupils							
	Pictures	Total value of General Equipment	Schools using authorized Scripture Readings	Schools using the Bible	Schools in which Passages are Memorized	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other Continuation or High Schools	Without occupation
	$	$														
1	9	839	.....	1	.....	1	....	....	3	3	.....	....	4	5	.....	....
2	13	568	1	1	.....	1	....	....	.....	3	.....	....	....	1	5	....
3	....	813	.....	1	.....	1	....	....	.....	2	.....	3	....	2	1	2
4	....	400	1	....	.....	1	....	....	.....	.....	.....	....	....	....	2	1
5	....	814	.....	....	.....	1	1	....	.....	1	.....	2	1	....	.....	....
6	....	599	1	....	.....	1	....	....	.....	1	.....	4	....	3	1	2
7	....	601	1	1	.....	1	....	....	3	2	1	1	....	3	2	3
8	3	890	.....	....	.....	1	....	....	1	4	.....	5	....	4	3	....
9	....	791	.....	1	.....	1	....	....	.....	.....	.....	2	....	....	.....	2
10	50	1,037	1	1	.....	1	1	1	1	4	.....	10	....	1	1	....
11	50	1,194	1	1	.....	1	....	1	1	3	2	2	....	....	8	....
12	13	501	1	1	.....	1	....	....	.....	.....	.....	.....	.....	....	3	2
13	....	663	1	1	.....	1	....	....	1	3	.....	....	2	1	2	1
14	....	724	.....	1	.....	1	....	....	1	4	.....	2	1	1	.....	6
15	....	397	.....	....	.....	1	....	....	.....	1	.....	....	....	....	.....	3
16	....	1,727	.....	....	.....	1	....	1	1	1	.....	1	5	3	3	5
17	....	656	.....	1	.....	1	....	....	1	2	1	....	....	1	.....	1
18	50	924	1	....	.....	1	....	1	3	3	2	8	2	1	4	....
19	34	898	.....	....	.....	1	....	....	.....	.....	.....	4	....	1	2	6
20	13	921	.....	....	.....	1	1	1	2	2	.....	4	....	2	3	....
21	10	857	1	....	.....	1	....	....	3	.....	1	2	....	2	1	7
22	....	613	.....	....	.....	1	1	....	3	7	2	....	....	3	3	....
23	6	635	.....	1	.....	1	....	....	1	.....	.....	1	....	2	1	....
24	18	825	1	....	.....	1	....	1	.....	3	.....	2	1	....	1	....
25	....	846	1	....	.....	1	....	....	2	2	1	....	2	5	.....	....
26	6	463	.....	1	.....	1	....	....	.....	.....	.....	....	....	....	2	....
27	25	871	1	1	.....	1	....	....	2	.....	.....	....	....	1	3	2
28	25	633	.....	....	.....	1	....	....	.....	2	.....	2	....	2	2	4
29	....	872	.....	....	.....	1	....	1	1	2	.....	3	....	2	.....	2
30	....	554	.....	1	.....	1	....	....	1	.....	1	2	3	1	2	4
31	3	498	.....	....	.....	1	1	....	.....	2	.....	....	....	1	.....	....
32	....	587	1	1	.....	1	....	....	1	2	.....	....	1	1	8	....
33	....	1,048	.....	1	.....	1	....	....	2	5	1	2	....	2	2	....
34	....	912	1	1	.....	1	1	1	5	3	2	2	2	5	.....	5
35	....	578	.....	1	.....	1	....	....	2	1	.....	1	....	2	2	....
36	....	428	.....	....	.....	1	....	....	.....	1	.....	....	....	5	.....	4
37	....	674	.....	1	.....	1	....	....	.....	2	.....	1	3	1	1	1
38	29	4,005	.....	1	1	1	1	1	2	5	2	10	....	2	4	....
39	....	868	.....	....	.....	1	....	....	4	3	1	1	3	2	4	....
40	....	732	.....	....	.....	1	....	1	1	2	.....	3	....	2	.....	4
41	10	711	1	1	.....	1	1	....	1	1	1	4	....	....	4	....
42	....	680	1	1	.....	1	....	....	3	1	.....	....	1	6	.....	....
43	....	464	.....	....	.....	1	1	....	.....	.....	.....	....	....	....	1	....
44	38	891	1	....	.....	1	....	....	3	4	.....	4	1	....	1	....
45	25	1,139	1	....	.....	1	1	....	1	8	2	2	3	1	.....	2
46	....	621	.....	....	.....	1	....	....	1	2	.....	....	....	2	3	....
47	....	814	.....	....	.....	1	....	....	.....	5	.....	3	....	3	4	1
48	....	765	.....	....	.....	1	....	....	.....	1	.....	....	....	....	1	....
49	39	1,047	1	1	.....	1	1	....	4	3	3	4	1	2	.....	1
50	67	1,119	.....	1	.....	1	1	1	1	2	.....	3	1	8	.....	....

CONTINUATION

II. TABLE I—SCHOOLS UNDER PUBLIC SCHOOL

Continuation Schools —Continued	Schools under Public or Separate School Board	Value of General									
		Library	Scientific Apparatus	Charts, Maps and Globes	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium, not including Equipment	Museum	Aquarium or Herbarium
		$	$	$	$	$	$	$	$	$	$
51 Harrow	1	192	266	43	35	....	34	.....	.....	.....	.....
52 Havelock	1	391	308	30	46	....	47	10	.....	.....	.....
53 Hepworth	1	150	189	50	50	....	49	.....	.....	.....	.....
54 Highgate	1	306	303	45	32	....	15	17	.....	.....	.....
55 Huntsville	1	384	582	90	58	....	67	73	50	.....	.....
56 Jarvis	1	298	185	38	52	....	23	.....	.....	.....	.....
57 Jockvale	1	140	196	57	22	....	34	10	.....	.....	.....
58 Kars	1	188	231	68	41	....	28	.....	.....	.....	.....
59 Keewatin	1	303	364	76	42	....	26	.....	.....	.....	.....
60 Kenmore	1	204	416	34	29	....	79	10	.....	.....	.....
61 Kinburn	1	207	314	67	21	....	39	20	.....	.....	.....
62 Lakefield	1	218	522	45	42	....	28	.....	.....	.....	.....
63 Lanark	1	284	361	97	49	....	40	27	.....	.....	.....
64 Lansdowne	1	152	187	25	35	....	46	.....	.....	.....	.....
65 Lion's Head	1	70	95	7	.....	....	.....	.....	.....	.....	.....
66 Little Current	1	163	167	53	23	....	23	167	.....	.....	.....
67 Lucknow	1	359	439	44	35	....	55	.....	.....	.....	.....
68 Malakoff	1	119	259	14	18	....	23	.....	.....	.....	.....
69 Manitowaning	1	115	169	33	29	....	9	.....	.....	.....	.....
70 Manotick	1	122	150	38	45	....	13	.....	.....	.....	.....
71 Massey	1	237	169	35	17	....	53	.....	.....	.....	.....
72 Maxville	1	190	203	38	40	....	26	.....	.....	.....	.....
73 Melbourne	1	296	336	55	46	....	39	13	.....	.....	.....
74 Merlin	1	253	161	34	48	....	17	27	.....	.....	.....
75 Merrickville	1	227	349	59	34	....	62	18	.....	.....	.....
76 Metcalfe	1	244	281	53	23	....	33	.....	.....	.....	.....
77 Millbrook	1	406	422	71	57	....	62	.....	.....	.....	.....
78 Milverton	1	47	184	64	10	....	.....	.....	.....	.....	.....
79 Mount Albert	1	360	464	69	44	....	30	.....	.....	.....	.....
80 Mount Brydges	....	215	23	23	33	....	35	16	.....	.....	.....
81 Navan	1	172	244	17	38	....	52	.....	.....	.....	.....
82 New Hamburg	1	320	393	48	51	....	82	10	.....	.....	.....
83 New Liskeard	1	358	467	104	74	....	107	.....	.....	.....	.....
84 New Toronto	1	311	405	49	29	....	57	.....	.....	.....	.....
85 North Augusta	1	237	217	51	23	....	8	9	.....	.....	.....
86 North Gower	1	288	300	36	56	....	51	11	.....	.....	.....
87 Norwich	1	330	386	68	33	....	42	5	.....	.....	.....
88 Odessa	....	233	411	69	46	....	25	18	.....	.....	.....
89 Oil Springs	1	251	330	23	196	....	17	16	.....	.....	.....
90 Orono	1	146	236	27	24	....	25	.....	.....	.....	.....
91 Paisley	1	250	525	61	51	....	83	31	.....	.....	.....
92 Pakenham	1	218	370	33	63	....	18	.....	.....	.....	.....
93 Palmerston	1	334	265	68	60	....	12	.....	.....	.....	3
94 Plattsville	1	281	394	33	55	....	32	10	.....	.....	.....
95 Port Burwell	1	273	378	47	36	....	37	3	.....	.....	.....
96 Port Colborne	1	368	443	72	32	....	38	40	.....	.....	.....
97 Port Credit	1	177	345	83	35	....	63	.....	.....	.....	.....
98 Powassan	1	136	220	24	22	....	25	.....	.....	.....	.....
99 Princeton	1	294	258	23	35	....	23	20	.....	.....	.....

SCHOOLS—Continued

BOARD, VALUE OF EQUIPMENT, ETC.—Continued

Equipment			Religious and other Exercises						Destination of Pupils								
	Pictures	Total value of General Equipment	Schools using authorized Scripture Readings	Schools using the Bible	Schools in which Passages are memorized	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other Continuation or High Schools	Without occupation
	$	$														
51	23	593	1	1	.....	1	....	....	2	2	.....	....	1	1	3	5
52	10	842	.....	1	.....	1	....	....	3	.....	1	3	....	1	.....	1
53	52	540	.....	....	1	1	....	....	.....	.....	.....	....	....	....	.....	....
54	....	718	.....	....	.....	1	....	....	3	3	.....	1	....	4	3	2
55	20	1,324	.....	1	.....	1	....	....	4	2	.....	2	....	2	3	3
56	....	596	1	1	.....	1	1	....	.....	5	.....	....	....	....	6	....
57	....	459	.....	....	.....	1	1	....	1	3	.....	....	....	....	1	....
58	....	556	1	1	.....	1	....	1	.....	.....	.....	....	....	3	2	....
59	....	811	1	....	.....	1	....	....	2	.....	.....	1	....	1	.....	....
60	....	772	.....	....	.....	1	....	....	.....	2	.....	....	....	4	.....	....
61	15	683	.....	....	.....	1	....	....	.....	.....	.....	2	....	4	5	....
62	....	855	.....	1	.....	1	1	....	2	1	.....	6	2	5	3	1
63	....	858	1	1	.....	1	....	....	3	1	.....	3	2	1	3	....
64	....	445	1	1	.....	1	....	....	.....	2	.....	....	....	....	4	2
65	....	172	.....	1	.....	1	1	....	.....	.....	.....	....	....	....	.....	....
66	....	596	1	1	.....	1	....	....	1	.....	.....	2	....	....	6	1
67	....	932	.....	1	.....	1	....	....	2	2	.....	4	....	1	.....	4
68	10	443	1	1	.....	1	....	....	.....	.....	.....	....	....	....	.....	....
69	....	355	1	1	.....	1	....	....	.....	.....	.....	1	....	....	1	....
70	15	383	1	1	.....	1	....	....	.....	.....	.....	....	....	1	2	2
71	....	511	.....	1	.....	1	1	....	1	.....	.....	1	....	....	2	4
72	....	497	.....	....	.....	1	1	1	2	15	.....	5	....	....	.....	2
73	10	795	.....	1	.....	1	....	....	1	4	.....	4	....	1	.....	....
74	....	540	.....	....	.....	1	....	....	1	.....	1	1	....	....	.....	....
75	5	754	1	1	.....	1	....	....	2	.....	.....	3	....	....	1	3
76	16	650	1	1	.....	1	....	....	2	7	.....	1	....	....	4	4
77	....	1,018	1	....	.....	1	....	....	8	4	.....	1	1	....	4	6
78	....	305	.....	....	.....	1	....	....	.....	.....	.....	....	....	....	.....	....
79	....	967	1	....	.....	1	....	....	.....	2	.....	....	....	3	4	3
80	....	345	1	....	.....	1	....	....	.....	2	.....	....	....	....	1	....
81	....	523	.....	....	.....	1	....	....	.....	1	.....	2	....	2	4	....
82	....	904	1	....	.....	1	....	....	1	.....	.....	2	....	2	3	....
83	....	1,110	.....	1	.....	1	....	....	2	1	.....	1	2	6	2	....
84	24	875	.....	1	.....	....	....	....	.....	.....	.....	....	....	....	1	....
85	....	545	1	1	.....	1	....	....	.....	.....	2	1	....	8	1	....
86	4	746	.....	....	.....	1	....	1	.....	8	.....	4	1	....	8	3
87	....	864	1	1	.....	1	....	....	3	1	1	2	2	3	6	1
88	15	817	1	1	.....	1	....	1	.....	.....	1	4	....	....	.....	1
89	....	833	.....	1	.....	1	....	....	6	2	1	....	1	1	1	5
90	25	483	.....	....	.....	1	....	....	4	.....	.....	1	....	1	2	1
91	....	1,001	.....	1	.....	1	....	....	8	4	1	4	....	1	2	14
92	....	702	.....	....	.....	1	....	....	3	2	.....	2	....	3	3	....
93	....	742	.....	1	.....	1	....	....	.....	.....	.....	2	....	5	7	....
94	....	805	1	1	.....	1	....	....	2	2	.....	3	....	4	.....	....
95	5	779	.....	1	.....	1	....	....	2	.....	.....	.....	....	....	.....	....
96	20	1,013	1	1	.....	1	....	1	3	2	.....	....	4	2	5	....
97	....	703	.....	1	.....	1	....	....	.....	.....	.....	....	....	....	.....	....
98	....	427	.....	....	.....	1	....	....	2	1	.....	2	....	1	4	....
99	....	653	1	1	.....	1	....	....	.....	2	.....	2	....	....	.....	....

CONTINUATION

II. TABLE I—SCHOOLS UNDER PUBLIC SCHOOL

Continuation Schools—Concluded	Schools under Public or Separate School Board	Value of General									
		Library	Scientific Apparatus	Charts, Maps and Globes	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium, not including equipment	Museum	Aquarium or Herbarium
		$	$	$	$	$	$	$	$	$	$
100 Richard's Landing	.....	124	89	21	20	....	12	.....	.....	.....	....
101 Ridgeway	1	324	299	55	40	....	22	7	.....	.....	....
102*Richmond	1	173	166	16	22	....	15	4	.....	.....	....
103 Ripley	1	315	403	58	26	....	14	.....	.....	.....	....
104 Rodney	1	265	374	55	50	....	41	6	.....	.....	....
105 Russell	1	232	317	60	44	....	23	.....	.....	.....	....
106 St. George	.....	302	349	53	50	....	54	.....	.....	.....	....
107 Schomberg	1	190	190	39	29	....	31	.....	.....	.....	....
108 Scotland	1	120	238	61	69	....	59	15	.....	.....	....
109 Southampton	1	375	448	96	53	60	25	10	.....	.....	....
110 South Mountain	1	73	503	77	38	....	39	21	.....	.....	....
111 South Porcupine	1	154	166	60	44	....	49	6	.....	.....	....
112 Spencerville	1	195	362	37	40	....	22	.....	.....	.....	....
113 Springfield	1	430	602	75	64	....	116	20	.....	.....	....
114 Stayner	1	215	428	54	44	....	39	18	.....	.....	....
115 Stella	.....	96	203	51	17	....	18	9	.....	.....	....
116 Stouffville	1	140	378	49	19	....	27	.....	.....	.....	9
117 Sturgeon Falls	1	229	311	105	45	....	3	30	.....	.....	....
118 Sutton	1	283	353	67	35	....	18	.....	.....	.....	....
119 Tamworth	†	306	261	41	28	....	26	.....	.....	.....	....
120 Tara	1	249	453	53	54	....	12	.....	.....	.....	....
121 Tavistock	1	298	335	32	28	....	29	.....	.....	.....	....
122 Teeswater	1	357	357	56	46	....	60	.....	.....	.....	....
123 Thamesville	1	350	323	32	59	....	16	.....	.....	.....	....
124 Thessalon	1	289	379	30	29	....	12	.....	.....	.....	....
125 Thornbury	1	226	542	59	33	....	28	29	.....	.....	....
126 Thorndale	.....	320	354	83	45	....	35	4	.....	.....	....
127 Tilbury	1	211	297	51	37	....	23	.....	.....	.....	....
128 Timmins	1	185	177	56	44	....	21	.....	.....	.....	....
129 Tottenham	1	231	338	40	63	....	19	10	.....	.....	....
130 Warkworth	1	269	333	65	71	....	67	19	.....	.....	....
131 Webbwood	1	119	209	27	36	....	20	.....	.....	.....	....
132 Westboro'	1	250	221	45	49	100	32	.....	.....	.....	....
133 West Lorne	1	299	368	66	61	....	43	13	.....	.....	....
134 Westmeath	1	198	165	43	30	....	25	9	.....	.....	....
135 Westport	1	281	486	38	21	....	39	24	.....	.....	....
136 Westport (R.C.S.S.)	1	305	290	45	42	....	73	.....	.....	.....	4
137 Winona	1	210	212	40	35	....	10	16	.....	.....	....
138 Wroxeter	1	395	387	49	52	....	23	12	.....	.....	....
1 Totals, 1919	128	34,051	45,578	6,928	5,847	310	5,018	1,418	3,050	18	32
2 Totals, 1918	130	32,516	42,924	6,385	5,323	380	3,771	1,312	3,077	43	25
3 Increases	.....	1,535	2,654	543	524	....	1,247	106	.....	.....	7
4 Decreases	2	.....	.....	.....	.....	70	.....	.....	27	25	....
5 Percentages	.....	32.96	44.12	6.70	5.66	.30	4.85	1.37	2.95	.01	.03

*Closed June, 1919 † Consolidated School Board

SCHOOLS—Continued

BOARD, VALUE OF EQUIPMENT, ETC.—Concluded

	Equipment		Religious and other Exercises						Destination of Pupils								
	Pictures	Total value of General Equipment	Schools using authorized Scripture Readings	Schools using the Bible	Schools in which Passages are Memorized	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other Continuation or High Schools	Without occupation
	$	$														
100	....	266	.....	1	....	1	....	1	....	....	.....	....	....	1	1	....
101	....	747	1	....	....	1	....	....	1	1	.....	3	....	1	1	....
102	....	396	1	....	....	1	....	....	1	6	.....	....	....	.....	3	3
103	....	816	1	1	....	1	....	....	5	8	.....	5	....	.....	.....	2
104	15	806	.....	1	....	1	1	1	4	3	.....	3	....	.....	2	1
105	....	676	.....	....	....	1	....	....	1	2	.....	....	1	.....	1	4
106	....	808	.....	....	....	1	....	....	....	1	.....	1	....	2	4	2
107	....	479	1	1	....	1	....	....	1	4	2	....	....	.....	2	....
108	24	586	1	1	....	1	....	....	4	1	.....	....	1	.....	.....	....
109	15	1,082	1	1	....	1	....	....	2	....	.....	3	6	4	9	....
110	52	803	.....	....	....	1	....	....	....	2	1	....	....	2	1	....
111	27	506	1	1	....	1	....	....	2	....	.....	....	1	.....	2	....
112	....	656	.....	1	....	1	....	....	1	1	1	1	....	2	2	....
113	....	1,307	1	1	....	1	....	....	....	2	.....	1	....	3	1	....
114	....	798	.....	....	....	1	....	....	2	2	.....	2	....	3	1	....
115	....	394	1	1	....	1	....	1	....	....	.....	1	....	1	4	....
116	....	622	1	1	....	1	....	....	2	8	3	4	1	1	5	....
117	....	723	1	1	....	1	1	1	....	....	.....	....	....	3	1	....
118	....	756	.....	....	....	1	....	....	1	1	.....	2	1	1	2	1
119	....	662	.....	....	....	1	....	....	4	4	1	11	1	.....	1	....
120	....	821	.....	....	....	1	....	....	4	1	.....	2	....	2	2	....
121	10	732	1	....	....	1	....	....	....	1	2	1	....	5	6	....
122	....	876	.....	....	....	1	....	....	2	1	2	1	....	1	1	....
123	....	780	1	1	....	1	....	....	2	2	.....	1	....	2	4	....
124	5	744	1	1	....	1	1	....	....	....	.....	6	....	.....	1	1
125	....	917	.....	1	....	1	....	....	5	2	.....	....	....	8	5	....
126	11	852	1	1	....	1	....	....	....	2	1	2	....	2	1	3
127	....	619	1	1	....	1	....	....	4	....	.....	....	....	.....	5	2
128	....	484	1	1	....	1	....	....	....	....	.....	....	2	.....	4	....
129	....	701	.....	....	....	1	1	....	....	2	2	....	....	.....	1	....
130	....	824	.....	1	....	1	....	....	4	5	.....	1	1	4	3	1
131	....	411	1	1	....	1	....	....	2	....	.....	....	1	4	3	2
132	13	710	1	1	....	1	....	....	12	....	.....	....	8	.....	.....	....
133	13	863	.....	....	....	1	....	1	1	....	.....	1	....	.....	1	....
134	2	472	.....	....	....	1	....	....	....	4	.....	....	....	.....	3	6
135	....	889	.....	....	....	1	....	....	1	3	.....	1	....	3	2	2
136	33	792	.....	1	1	1	1	1	....	....	.....	1	....	.....	3	....
137	15	538	.....	....	....	1	....	....	5	6	.....	....	....	2	11	2
138	....	918	.....	1	....	1	....	....	4	3	.....	3	1	2	1	....
1	1,040	103,290	62	80	3	137	23	22	215	269	46	239	78	224	297	71
2	1,057	96,813	57	71	3	136	23	27	294	445	44	227	98	271	306	161
3	.....	6,477	5	9	....	1	....	....	....	....	2	3	....	.....	.....	....
4	17	.....	.....	....	....	....	....	5	79	176	.....	....	20	47	9	90
5	1.00	.....	44.92	57.97	2.17	99.27	16.66	15.94	15.03	18.81	3.21	16.08	5.45	15.66	20.77	4.96

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS AND

Continuation Schools	Pupils					Number of Pupils in—			Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School F. I	Lower School F. II	Middle School	School Sections forming C.S. District or from School Section	Other Sections	No. of other Sections thus represented
1 Acton	66	33	26	40	54	33	20	13	58	8	6
2 Agincourt	17	11	9	8	13	11	6	.....	10	7	4
3 Alvinston	43	14	15	28	34	18	12	13	17	26	7
4 Arkona	22	7	7	15	13	19	3	.....	11	11	3
5 Ayr	27	10	9	18	22	12	9	6	21	6	4
6 Bancroft	35	7	14	21	25	8	14	13	20	15	14
7 Bath	21	10	9	12	16	11	5	5	13	8	5
8 Beaverton	52	20	14	38	41	23	19	10	27	25	6
9 Beeton	38	10	14	24	30	10	19	9	18	20	7
10 Belmont	53	15	20	33	47	17	23	13	24	29	5
11 Blenheim	63	22	27	36	42	23	26	14	53	10	4
12 Blind River	26	12	14	12	17	13	6	7	20	6	3
13 Blyth	39	11	17	22	29	16	16	7	21	18	8
14 Bothwell	27	11	11	16	21	16	7	4	16	11	4
15 Bowesville	12	7	6	6	9	8	4	.....	11	1	1
16 Bridgeburg	42	20	16	26	35	21	12	9	21	21	6
17 Bruce Mines	28	13	7	21	24	12	10	6	14	14	5
18 Brussels	78	33	28	50	58	38	24	16	24	54	18
19 Burk's Falls	32	11	11	21	23	12	15	5	26	6	3
20 Cannington	48	19	17	31	35	19	18	11	25	23	2
21 Cardinal	46	15	17	29	30	17	22	7	36	10	5
22 Carp	55	19	19	36	40	20	15	20	28	27	5
23 Chapleau	34	16	14	20	27	15	9	10	34	.....	....
24 Claremont	31	10	13	18	26	10	15	6	14	17	7
25 Clifford	24	9	9	15	21	10	9	5	16	8	5
26 Cochrane	11	7	4	7	7	7	4	.....	11	.....	....
27 Coldwater	42	10	18	24	31	12	15	15	32	10	6
28 Comber	19	11	10	9	15	11	6	2	15	4	2
29 Cookstown	55	18	23	32	45	21	19	15	28	27	6
30 Creemore	38	14	13	25	30	17	12	9	12	26	10
31 Delaware	36	13	16	20	33	14	12	10	10	26	10
32 Delhi	20	11	5	15	14	12	8	.....	6	14	6
33 Drayton	84	32	34	50	60	35	30	19	27	57	23
34 Dresden	59	27	27	32	46	27	18	14	35	24	7
35 Drumbo	16	10	6	10	14	10	4	2	13	3	2
36 Dryden	18	10	9	9	14	9	3	6	18	.....	....
37 Eganville	34	11	13	21	27	13	15	6	21	13	5
38 Eganville (R.C.S.S.)	53	18	29	24	46	18	14	21	32	21	13
39 Elmira	67	25	29	38	58	30	22	15	38	29	6
40 Elmvale	35	18	15	20	27	19	10	6	18	17	7
41 Ennismore	19	4	10	9	15	4	8	7	19	.....	....
42 Erin	33	9	17	16	25	8	13	12	15	18	10
43 Espanola	8	6	3	5	5	6	2	.....	5	3	1
44 Fenelon Falls	46	14	17	29	37	21	17	8	31	15	....
45 Finch	59	27	22	37	45	27	20	12	23	36	12
46 Fingal	25	11	9	16	18	13	5	7	14	11	7
47 Frankford	29	11	12	17	22	11	8	10	20	9	4
48 Gore Bay	39	18	19	20	34	18	12	9	16	23	9
49 Grand Valley	50	16	21	29	41	16	18	16	20	30	8
50 Hanover	63	22	26	37	56	27	19	17	53	10	7

SCHOOLS—Continued

IN THE VARIOUS SUBJECTS, ETC.

	Number of Pupils from Families whose Head is occupied as below—								Number of Pupils in the Various Subjects					
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History
1	12	10	3	.....	25	10	4	2	53	65	65	65	65	13
2	2	8	2	.....	3	2	.....	.....	17	17	17	17	6	.....
3	4	33	.....	.....	6	.....	.....	.....	30	43	43	43	25	13
4	3	15	.....	.....	1	1	1	1	22	22	22	22	3	.....
5	..	15	.....	.....	6	3	3	.....	21	27	27	27	15	6
6	7	14	2	1	4	1	5	1	22	35	35	35	27	13
7	1	9	2	.....	3	4	1	1	16	21	21	21	10	5
8	7	31	.....	.....	.....	4	6	4	42	52	52	33	29	10
9	2	23	2	.....	9	.....	.....	2	29	37	35	35	25	6
10	3	44	.....	.....	4	2	.....	.....	40	53	53	53	53	13
11	10	33	3	.....	12	5	.....	.....	45	63	63	37	40	14
12	..	.....	1	.....	3	22	.....	.....	19	26	26	26	13	7
13	3	22	.....	.....	9	5	.....	.....	32	39	39	39	23	7
14	6	11	2	.....	3	.....	5	.....	23	27	27	27	11	4
15	..	12	.....	.....	.....	.....	.....	.....	12	12	12	8	4	.....
16	5	8	.....	.....	19	5	5	.....	25	42	42	42	25	9
17	3	15	.....	.....	5	5	.....	.....	22	28	28	28	16	6
18	4	52	3	.....	6	5	5	3	62	78	76	78	78	16
19	8	9	3	.....	4	8	.....	.....	27	32	32	32	32	5
20	6	16	3	.....	4	4	10	5	37	48	48	48	48	11
21	3	19	.....	.....	5	12	4	3	39	46	46	46	29	7
22	9	37	2	1	.....	.....	6	.....	35	55	55	35	35	20
23	2	.....	1	1	18	10	2	.....	24	33	33	33	33	9
24	1	18	5	.....	2	2	3	.....	25	31	31	16	21	6
25	5	14	1	.....	1	.....	3	.....	19	24	24	24	24	5
26	3	.....	.....	.....	6	.....	2	.....	11	11	11	11	11	.....
27	16	15	2	.....	.....	4	5	.....	27	42	42	42	30	15
28	3	9	2	.....	1	.....	4	.....	17	19	19	19	8	2
29	4	38	3	.....	4	2	4	.....	40	55	55	55	34	15
30	5	27	1	.....	.....	3	1	1	29	38	38	38	38	9
31	2	32	2	.....	.....	.....	.....	.....	26	36	36	36	22	10
32	2	10	1	.....	5	2	.....	.....	20	20	20	12	8	.....
33	8	59	1	.....	6	3	6	1	65	84	84	84	49	19
34	6	29	3	1	7	2	8	3	45	59	59	59	59	14
35	2	9	2	.....	2	1	.....	.....	14	16	16	16	6	2
36	2	1	.....	.....	1	7	7	.....	12	18	18	18	9	6
37	2	14	2	.....	5	1	6	4	28	34	34	19	21	6
38	11	22	3	.....	4	5	8	.....	32	53	53	53	53	21
39	12	27	2	1	18	.....	7	.....	51	67	67	67	37	15
40	4	17	1	.....	5	.....	7	1	29	35	35	35	16	6
41	..	19	.....	.....	.....	.....	.....	.....	11	19	19	19	15	7
42	6	17	4	.....	3	.....	1	2	21	33	33	33	25	12
43	..	3	.....	.....	5	.....	.....	.....	8	8	8	8	2	.....
44	2	15	2	.....	15	8	4	.....	38	46	46	46	25	8
45	1	32	2	.....	5	7	11	1	47	59	59	59	32	12
46	..	20	1	.....	.....	1	3	....	18	25	25	18	12	7
47	4	19	.....	.....	3	1	.....	2	19	29	29	29	29	10
48	..	20	1	.....	2	10	5	1	30	39	39	39	20	8
49	10	22	3	.....	4	5	.....	6	34	50	50	50	50	16
50	18	13	6	.....	6	11	5	4	46	63	63	44	36	17

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools	Number of Pupils in the Various Subjects							
	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	French	German	Latin
1 Acton	53	53	53	65	32	60	.....	33
2 Agincourt	17	17	17	17	6	14	.....	14
3 Alvinston	30	30	30	43	25	33	.....	31
4 Arkona	22	22	22	22	3	20	.....	22
5 Ayr	21	21	21	27	15	27	.....	27
6 Bancroft	22	22	22	35	27	15	.....	14
7 Bath	16	16	16	21	10	15	.....	20
8 Beaverton	42	42	42	52	29	49	.....	49
9 Beeton	29	29	29	37	27	34	.....	37
10 Belmont	40	40	40	53	36	52	.....	52
11 Blenheim	45	45	45	63	40	39	.....	39
12 Blind River	19	19	19	19	13	24	.....	23
13 Blyth	32	32	32	39	23	37	.....	38
14 Bothwell	23	23	23	27	11	23	.....	27
15 Bowesville	12	12	12	12	4	11	.....	9
16 Bridgeburg	37	37	25	42	25	34	.....	32
17 Bruce Mines	22	22	24	28	16	23	.....	26
18 Brussels	62	62	62	78	40	58	.....	65
19 Burk's Falls	27	27	27	32	20	30	.....	29
20 Cannington	37	37	37	48	29	47	.....	47
21 Cardinal	39	39	39	46	29	24	.....	30
22 Carp	35	35	35	55	35	42	.....	42
23 Chapleau	24	24	24	33	33	30	.....	31
24 Claremont	25	25	25	31	21	31	.....	31
25 Clifford	19	19	19	24	14	22	.....	22
26 Cochrane	11	11	11	11	4	11	.....	11
27 Coldwater	27	27	27	42	30	33	.....	33
28 Comber	17	17	17	19	8	19	.....	16
29 Cookstown	40	40	40	55	34	53	.....	53
30 Creemore	29	29	29	38	21	34	.....	32
31 Delaware	26	26	26	36	22	31	.....	32
32 Delhi	20	20	20	20	8	16	.....	18
33 Drayton	65	65	65	84	49	84	.....	84
34 Dresden	45	45	45	59	32	49	.....	43
35 Drumbo	14	14	14	16	6	16	.....	16
36 Dryden	12	12	12	18	9	18	.....	18
37 Eganville	25	28	28	34	21	25	.....	25
38 Eganville (R.C.S.S.)	32	32	32	53	35	39	.....	36
39 Elmira	51	52	52	67	37	56	.....	64
40 Elmvale	29	.....	29	35	16	30	.....	35
41 Ennismore	11	11	11	19	15	13	.....	14
42 Erin	21	21	21	33	25	30	.....	33
43 Espanola	8	8	8	8	2	8	.....	8
44 Fenelon Falls	38	38	38	46	8	44	.....	44
45 Finch	47	47	47	59	32	55	.....	55
46 Fingal	18	18	18	18	12	20	.....	20
47 Frankford	19	19	19	29	18	12	.....	12
48 Gore Bay	30	30	30	39	39	35	.....	37
49 Grand Valley	34	34	34	50	33	50	.....	50
50 Hanover	46	46	46	63	36	55	.....	58

SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

Number of Pupils in the Various Subjects—Continued

	Zoology	Botany	Chemistry	Physics	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Agriculture
1	46	46	12	13	56	.....	.....	.....	46	66	.....
2	17	17	6	17	17	.....	.....	.....	17	17	.....
3	30	30	25	43	43	.....	.....	.....	30	43	.....
4	22	22	3	22	22	.....	.....	.....	22	22	.....
5	21	21	15	27	21	.....	.....	.....	21	27	.....
6	22	22	27	35	22	.....	.....	.....	22	35	.....
7	16	16	10	21	16	.....	.....	.....	16	21	.....
8	.....	.....	10	10	23	.....	.....	.....	42	52	.....
9	29	29	27	37	29	.....	.....	.....	29	38	.....
10	40	40	36	53	40	.....	.....	.....	40	53	.....
11	45	45	14	63	45	.....	.....	.....	45	63	.....
12	19	19	26	26	19	.....	.....	.....	19	26	.....
13	32	32	7	39	32	.....	.....	.....	32	39	.....
14	23	23	4	27	23	.....	.....	.....	23	27	.....
15	12	12	12	12	12	.....	.....	.....	12	12	.....
16	37	37	25	25	37	.....	.....	.....	22	42	.....
17	22	22	16	28	22	.....	.....	.....	22	28	.....
18	62	62	40	78	62	.....	.....	.....	63	78	.....
19	27	27	20	32	27	.....	.....	.....	27	32	.....
20	33	33	29	48	37	.....	.....	.....	21	48	.....
21	39	39	29	46	39	.....	.....	.....	39	46	.....
22	35	35	20	20	35	.....	.....	.....	35	53	.....
23	24	24	33	33	24	.....	.....	.....	24	34	.....
24	25	25	21	31	25	.....	.....	.....	25	31	.....
25	19	19	14	24	19	.....	.....	.....	19	24	.....
26	11	11	.....	11	7	.....	.....	.....	11	11	.....
27	27	27	30	42	27	.....	.....	.....	27	42	.....
28	17	17	8	19	17	.....	.....	.....	17	19	.....
29	40	40	34	55	40	.....	.....	.....	40	55	.....
30	29	29	9	9	.....	.....	.....	.....	31	38	.....
31	26	26	22	36	26	.....	.....	.....	26	36	.....
32	20	20	8	20	20	.....	.....	.....	19	20	.....
33	65	65	49	84	65	.....	.....	.....	65	79	65
34	45	45	32	59	45	.....	.....	.....	45	59	.....
35	14	14	6	16	14	.....	.....	.....	14	16	.....
36	12	12	9	18	12	.....	.....	.....	.....	18	.....
37	28	28	21	34	28	.....	.....	.....	25	34	.....
38	32	32	35	53	3	.....	.....	.....	32	52	.....
39	52	52	37	67	51	.....	.....	.....	49	66	.....
40	29	29	16	35	29	.....	.....	.....	29	32	.....
41	11	11	7	7	11	.....	.....	.....	11	19	.....
42	21	21	12	12	21	.....	.....	.....	21	33	.....
43	8	8	2	8	8	.....	.....	.....	8	8	.....
44	38	38	8	35	38	.....	.....	.....	38	46	.....
45	47	47	32	59	27	.....	.....	.....	47	59	.....
46	18	18	7	12	18	.....	.....	.....	18	25	.....
47	19	19	10	29	19	.....	.....	.....	19	29	.....
48	30	30	21	39	30	.....	.....	.....	30	39	.....
49	34	34	33	33	34	.....	.....	.....	34	50	.....
50	46	46	36	63	46	.....	.....	.....	46	63	.....

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools—Continued	Pupils					Number of Pupils in—			Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School		Middle School	School Sections forming C. S. District or from School Section	Other Sections	No. of other Sections thus represented
						F. I./F.II					
51 Harrow	33	14	13	20	24	15	9	9	14	19	7
52 Havelock	36	15	13	23	29	16	10	10	22	14	6
53 Hepworth	13	12	7	6	10	13	....	.....	7	6	4
54 Highgate	41	18	20	21	35	19	14	8	21	20	8
55 Huntsville	57	22	25	32	48	24	18	15	48	9	4
56 Jarvis	27	15	12	15	20	15	12	.....	12	15	7
57 Jockvale	13	7	4	9	9	7	6	.....	8	5	3
58 Kars	19	8	9	10	15	7	8	4	12	7	4
59 Keewatin	23	13	9	14	19	13	6	4	23	.....	.....
60 Kenmore	44	8	21	23	29	11	15	18	19	25	6
61 Kinburn	27	17	11	16	15	17	3	7	17	10	6
62 Lakefield	66	26	23	43	54	26	27	13	43	23	12
63 Lanark	61	26	24	37	48	26	16	19	31	30	15
64 Lansdowne	19	11	6	13	14	11	8	.....	14	5	4
65 Lion's Head	5	4	....	5	4	4	1	.....	4	1	1
66 Little Current	22	10	4	18	17	10	12	.....	15	7	3
67 Lucknow	70	28	27	43	55	31	23	16	31	39	18
68 Malakoff	21	5	6	15	19	5	6	10	14	7	1
69 Manitowaning	30	13	8	22	19	19	11	.....	10	20	9
70 Manotick	26	8	7	19	18	10	16	.....	12	14	6
71 Massey	17	12	10	7	14	13	4	.....	14	3	3
72 Maxville	59	17	24	35	39	24	24	11	18	41	11
73 Melbourne	44	13	11	33	36	13	20	11	16	28	12
74 Merlin	45	18	22	23	35	20	16	9	18	27	10
75 Merrickville	42	13	9	33	36	13	20	9	28	14	7
76 Metcalfe	28	9	9	19	18	12	5	11	13	15	8
77 Millbrook	59	20	24	35	47	24	21	14	24	35	9
78 Milverton	42	20	20	22	35	20	11	11	30	12	6
79 Mount Albert	38	19	15	23	26	19	12	7	34	4	2
80 Mount Brydges	38	13	11	27	31	13	19	6	30	8	3
81 Navan	29	11	10	19	22	9	10	10	18	11	5
82 New Hamburg	41	18	21	20	34	15	14	12	23	18	5
83 New Liskeard	40	15	7	33	28	25	7	8	26	14	11
84 New Toronto	19	8	8	11	9	8	3	8	7	12	4
85 North Augusta	18	7	6	12	15	7	5	6	8	10	7
86 North Gower	32	10	15	17	24	13	8	11	15	17	4
87 Norwich	78	36	36	42	63	39	21	18	32	46	10
88 Odessa	29	13	13	16	22	13	10	6	13	16	5
89 Oil Springs	33	15	8	25	29	14	7	12	22	11	6
90 Orono	38	15	20	18	33	16	8	14	17	21	11
91 Paisley	56	17	22	34	48	21	18	17	23	33	16
92 Pakenham	36	15	12	24	31	15	8	13	16	20	11
93 Palmerston	55	22	18	37	39	24	25	6	34	21	12
94 Plattsville	30	13	14	16	26	13	12	5	18	12	5
95 Port Burwell	31	11	7	24	17	12	8	11	24	7	3
96 Port Colborne	72	42	37	35	49	42	19	11	58	14	3
97 Port Credit	22	15	10	12	16	15	5	2	11	11	5
98 Powassan	18	8	6	12	15	9	9	.....	15	3	3
99 Princeton	23	6	10	13	18	6	8	9	18	5	5
100 Richard's Landing	18	10	3	15	17	10	8	.....	17	1	1
101 Ridgeway	39	13	17	22	31	13	17	9	23	16	6

SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of Pupils from Families whose Head is occupied as below—								Number of Pupils in the Various Subjects					
	Commerce	Agriculture	Law, Medicine, Dentistry, or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History
51	3	20	4	....	4	.....	2	.....	24	33	33	33	33	9
52	2	8	1	....	12	3	9	1	27	36	36	36	36	9
53	3	6	.....	....	1	3	....	.....	13	13	13	13	....	.....
54	7	22	.....	....	3	5	3	1	33	41	41	41	27	8
55	7	11	6	1	10	15	7	.....	42	57	57	57	33	18
56	1	20	2	....	1	.....	3	.....	27	27	27	27	12	.....
57	.....	12	.....	....	1	.....	....	.....	13	13	13	13	6	.....
58	.....	10	1	....	7	1	....	.....	15	19	18	19	12	4
59	.....	3	.....	....	9	5	6	.....	19	23	23	23	10	4
60	4	33	2	....	5	.....	....	.....	26	44	44	44	33	18
61	5	16	.....	....	....	5	....	1	20	27	27	27	10	7
62	6	18	5	....	....	15	16	6	53	66	66	66	40	13
63	7	34	.....	....	12	2	6	.....	42	61	59	59	33	17
64	5	7	1	....	1	5	....	.....	19	19	19	11	8	.....
65	3	1	.....	....	....	1	....	.....	5	5	5	4	1	.....
66	.....	8	1	....	....	.....	13	.....	22	22	22	22	12	.....
67	12	41	5	....	5	2	3	2	54	70	70	70	38	16
68	.....	21	.....	....	....	.....	....	.....	11	21	21	21	21	10
69	1	19	1	1	1	3	4	.....	30	30	30	30	11	.....
70	1	16	1	....	5	1	2	.....	26	26	26	26	16	.....
71	8	5	.....	....	4	.....	....	.....	17	17	17	17	4	.....
72	4	45	3	....	5	.....	2	.....	48	57	57	57	57	9
73	2	33	2	1	....	3	3	.....	33	44	44	44	44	11
74	7	27	.....	....	7	1	2	1	36	45	45	45	45	9
75	4	13	1	....	10	12	2	.....	33	41	41	41	28	8
76	1	24	1	....	....	2	....	.....	17	28	28	28	16	11
77	8	28	10	....	3	5	5	.....	45	59	59	59	59	14
78	3	22	2	....	10	1	2	2	31	42	42	31	22	11
79	4	11	2	....	2	2	10	7	31	38	38	38	19	7
80	2	35	.....	....	1	.....	....	.....	32	38	38	38	38	6
81	2	21	.....	....	2	1	3	.....	19	29	29	29	20	10
82	16	13	3	....	3	4	2	.....	29	41	41	41	26	12
83	6	11	5	1	10	.....	7	.....	32	39	39	39	14	7
84	5	3	2	....	8	.....	....	1	11	19	19	....	1	8
85	.....	14	1	....	1	.....	2	.....	12	18	18	7	11	6
86	.....	21	1	....	3	7	....	.....	21	32	32	32	32	11
87	5	52	4	....	2	4	6	5	60	78	77	77	77	17
88	8	14	1	....	2	1	....	3	23	29	29	19	16	6
89	6	10	1	....	9	2	5	.....	21	33	33	33	19	12
90	7	27	.....	....	....	2	....	2	24	38	38	38	38	14
91	3	36	3	....	6	2	6	.....	39	55	55	55	34	17
92	3	25	1	....	3	3	1	.....	23	36	36	36	21	13
93	2	26	.....	....	11	6	10	.....	49	55	55	55	31	6
94	5	20	2	1	....	2	....	.....	25	30	30	30	17	4
95	5	9	.....	....	4	2	11	.....	20	31	31	31	19	11
96	7	7	3	1	11	12	17	14	61	72	72	72	72	11
97	2	9	.....	....	1	2	8	.....	20	22	22	22	7	2
98	1	9	.....	....	2	3	3	.....	18	18	18	9	9	.....
99	.....	17	2	....	1	3	....	.....	14	23	23	23	17	9
100	.....	9	.....	....	6	3	....	.....	18	18	18	18	8	.....
101	9	20	2	....	1	2	3	2	30	39	39	39	28	9

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools—Con.	Number of Pupils in the Various Subjects—Continued.							
	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	French	German	Latin
51 Harrow	24	24	24	33	18	32	.....	31
52 Havelock	36	27	27	36	19	29	.....	35
53 Hepworth	13	13	13	13	.....	13	.....	13
54 Highgate	33	19	30	41	22	.....	.....	.....
55 Huntsville	42	42	42	57	33	40	.....	42
56 Jarvis	27	27	27	27	12	27	.....	27
57 Jockvale	13	13	13	13	6	.....	.....	6
58 Kars	15	15	15	19	10	17	.....	16
59 Keewatin	19	19	19	23	10	21	.....	21
50 Kenmore	26	11	26	44	33	43	.....	42
61 Kinburn	20	20	21	27	10	26	.....	25
62 Lakefield	53	53	53	66	40	.....	.....	66
63 Lanark	42	42	42	61	35	58	.....	61
64 Lansdowne	19	19	19	19	8	18	.....	18
65 Lion's Head	5	5	5	5	1	5	.....	5
66 Little Current	22	22	22	22	12	21	.....	20
67 Lucknow	54	54	54	70	38	55	.....	56
68 Malakoff	11	11	11	21	16	11	.....	12
69 Manitowaning	30	30	30	30	11	6	.....	13
70 Manotick	26	26	26	26	16	26	.....	20
71 Massey	17	17	17	16	4	16	.....	16
72 Maxville	48	48	48	57	34	46	.....	46
73 Melbourne	33	33	33	44	31	37	.....	37
74 Merlin	36	36	36	45	25	41	.....	38
75 Merrickville	33	33	33	41	41	32	.....	30
76 Metcalfe	17	17	17	28	16	25	.....	25
77 Millbrook	45	45	45	59	35	56	.....	47
78 Milverton	31	31	31	42	22	40	2	42
79 Mount Albert	31	31	31	38	19	29	.....	27
80 Mount Brydges	32	32	32	38	25	32	.....	20
81 Navan	19	19	19	29	20	25	.....	25
82 New Hamburg	29	29	29	41	27	26	11	40
83 New Liskeard	32	32	32	39	39	40	.....	40
84 New Toronto	11	11	11	19	11	19	.....	19
85 North Augusta	12	12	12	18	11	15	.....	16
86 North Gower	21	21	21	32	19	27	.....	32
87 Norwich	60	60	60	78	39	67	.....	68
88 Odessa	23	23	23	29	16	25	.....	26
89 Oil Springs	21	21	21	33	19	22	.....	23
90 Orono	24	24	24	38	22	35	.....	36
91 Paisley	40	39	41	55	34	49	.....	56
92 Pakenham	23	23	23	36	21	33	.....	34
93 Palmerston	49	49	49	55	31	44	.....	41
94 Plattsville	25	25	25	30	17	30	.....	30
95 Port Burwell	20	31	20	31	19	31	.....	31
96 Port Colborne	61	61	61	72	30	70	.....	68
97 Port Credit	20	20	20	22	7	22	.....	22
98 Powassan	18	18	18	18	9	14	.....	11
99 Princeton	14	14	14	23	17	19	.....	16
100 Richard's Landing	18	18	18	18	8	7	.....	10
101 Ridgeway	30	30	30	39	26	37	.....	37

SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

Number of Pupils in the Various Subjects—Continued

	Zoology	Botany	Chemistry	Physics	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Agriculture
51	24	24	18	33	24	.....	.....	.....	22	33	.....
52	26	26	10	30	27	.....	.....	.....	26	36	.....
53	13	13	13	13	13	.....	.....	.....	13	13	.....
54	33	33	22	41	19	.....	.....	.....	33	41	.....
55	42	42	33	57	42	.....	.....	.....	42	57	.....
56	27	27	12	27	3	.....	.....	.....	27	27	.....
57	13	13	6	13	13	.....	.....	.....	13	13	.....
58	15	15	12	19	15	.....	.....	.....	15	19	.....
59	19	19	10	23	19	13	13	13	19	23	.....
60	26	26	33	44	26	.....	.....	.....	26	44	.....
61	20	20	7	7	20	.....	.....	.....	20	27	.....
62	53	53	40	66	53	.....	.....	.....	53	66	.....
63	42	42	35	61	42	.....	.....	.....	42	61	.....
64	19	19	8	19	19	.....	.....	.....	19	19	.....
65	5	5	1	5	5	.....	.....	.....	5	5	.....
66	22	22	12	22	22	.....	.....	.....	22	22	.....
67	54	54	38	70	54	.....	.....	.....	54	70	.....
68	11	11	16	21	11	.....	.....	.....	11	21	.....
69	30	30	11	30	30	.....	.....	.....	30	30	.....
70	26	26	16	26	26	.....	.....	.....	26	26	.....
71	17	17	4	17	17	.....	.....	.....	4	17	.....
72	48	48	9	57	48	.....	.....	.....	48	56	.....
73	33	33	31	44	33	.....	.....	.....	34	44	.....
74	36	36	25	45	36	.....	.....	.....	.....	.....	.....
75	33	33	28	41	33	.....	.....	.....	33	41	.....
76	17	17	16	16	17	.....	.....	.....	17	28	.....
77	45	45	35	59	.....	.....	.....	.....	45	59	.....
78	31	31	22	42	31	.....	.....	.....	29	42	.....
79	31	31	19	38	31	.....	.....	.....	31	.....	.....
80	32	32	25	38	32	.....	.....	.....	32	38	.....
81	19	19	20	29	19	.....	.....	.....	19	29	.....
82	29	29	27	41	29	.....	.....	.....	29	41	.....
83	32	32	14	39	32	.....	.....	.....	32	38	32
84	11	11	18	18	11	.....	.....	.....	11	19	.....
85	12	12	11	18	11	.....	.....	.....	12	18	.....
86	21	21	19	32	21	.....	.....	.....	21	32	.....
87	59	59	39	78	60	.....	.....	.....	59	78	.....
88	23	23	16	29	23	.....	.....	.....	24	29	.....
89	21	21	19	33	33	.....	.....	.....	21	33	.....
90	.....	.....	14	14	24	.....	.....	.....	24	38	.....
91	39	39	34	35	39	.....	.....	.....	39	56	.....
92	23	23	21	36	23	.....	.....	.....	23	36	.....
93	49	49	31	55	49	.....	.....	.....	49	55	.....
94	25	25	17	30	25	.....	.....	.....	25	30	.....
95	20	20	19	31	20	.....	.....	.....	20	31	.....
96	61	61	11	72	61	.....	.....	.....	61	72	42
97	20	20	7	22	20	.....	.....	.....	20	22	.....
98	18	18	9	18	18	.....	.....	.....	18	18	.....
99	14	14	17	23	14	.....	.....	.....	14	23	.....
100	18	18	8	18	18	.....	.....	.....	18	18	.....
101	30	30	26	39	30	.....	.....	.....	30	39	30

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools—Continued	Pupils					Number of Pupils in—			Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School F. I	Lower School F. II	Middle School	School Sections forming C. S. District or from School Section	Other Sections	No. of other Sections thus represented
102 Ripley	68	25	22	46	56	23	26	19	31	37	13
103 Rodney	62	24	28	34	43	25	22	15	35	27	10
104 Russell	38	14	14	24	27	14	19	5	26	12	4
105 St. George	44	17	20	24	35	23	11	10	30	14	7
106 Schomberg	15	4	4	11	11	4	11	.....	7	8	4
107 Scotland	32	10	12	20	24	15	13	4	20	12	6
108 Southampton	49	24	24	25	35	26	15	8	40	9	6
109 South Mountain	48	18	14	34	38	21	19	8	14	34	6
110 South Porcupine	7	5	.....	7	5	5	2	.....	7	.....	....
111 Spencerville	26	10	12	14	22	12	9	5	26	.....	....
112 Springfield	32	11	12	20	27	13	9	10	23	9	4
113 Stayner	60	24	28	32	49	32	10	18	28	32	8
114 Stella	20	6	3	17	15	6	11	3	5	15	3
115 Stouffville	39	15	25	14	31	16	18	5	23	16	11
116 Sturgeon Falls	23	11	3	20	21	11	12	.....	19	4	1
117 Sutton	46	11	20	26	28	15	16	15	31	15	7
118 Tamworth	52	16	15	37	36	24	21	7	22	30	11
119 Tara	44	15	16	28	36	16	20	8	16	28	8
120 Tavistock	34	16	15	19	28	17	8	9	18	16	9
121 Teeswater	57	23	11	46	50	30	18	9	26	31	14
122 Thamesville	49	13	18	31	36	18	17	14	21	28	8
123 Thessalon	58	22	23	35	39	27	24	7	30	28	6
124 Thornbury	59	24	18	41	50	24	19	16	21	38	12
125 Thorndale	51	19	17	34	37	19	25	7	50	1	1
126 Tilbury	32	12	8	24	25	12	15	5	17	15	5
127 Timmins	18	12	10	8	15	5	13	.....	12	6	2
128 Tottenham	61	32	31	30	40	32	17	12	16	45	17
129 Warkworth	40	11	12	28	33	15	16	9	12	28	13
130 Webbwood	10	6	7	3	8	6	4	.....	10	.....	....
131 Westboro'	43	19	21	22	34	19	15	9	37	6	5
132 West Lorne	38	17	17	21	32	17	7	14	37	1	1
133 Westmeath	17	5	3	14	10	7	10	.....	8	9	....
134 Westport	26	8	13	13	19	8	12	6	22	4	3
135 Westport (R.C.S.S.)	35	13	8	27	29	13	12	10	28	7	3
136 Winona	18	11	6	12	8	13	5	.....	4	14	7
137 Wroxeter	36	16	17	19	22	14	15	7	10	26	13
1 Totals, 1919-1920	5,126	2,031	2,001	3,125	3,955	2,224	1,771	1,131	2,932	2,194	859
2 Totals, 1918-1919	5,006	1,975	1,867	3,139	3,773	2,220	1,714	1,072	2,793	2,213	893
3 Increases	120	56	134	.....	182	4	57	59	139	.....	....
4 Decreases	.....	.....	.....	14	.....	.....	.....	.....	.....	19	34
5 Percentages	.....	39.62	39.03	60.96	77.15	43.38	34.54	22.06	57.19	42.80	....

SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of Pupils from Families whose Head is occupied as below—								Number of Pupils in the Various Subjects					
	Commerce	Agriculture	Law, Medicine, Dentistry or the church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History
102	9	46	3	.....	1	9	.....	.....	49	68	68	68	45	17
103	19	26	....	.....	6	7	4	.....	47	61	61	61	36	14
104	2	18	2	.....	6	3	4	3	33	35	37	16	21	2
105	5	28	3	.....	6	2	.....	.....	34	44	44	44	21	10
106	6	6	1	.....	.....	.....	1	1	15	15	15	15	11	.....
107	..	18	1	.....	6	2	2	3	28	32	32	32	17	4
108	12	11	1	.....	10	10	5	.....	41	49	49	34	23	8
109	1	45	1	.....	1	.....	.....	.....	40	48	48	48	29	8
110	1	.....	....	.....	6	.....	.....	.....	7	7	7	7	2	.....
111	2	18	1	.....	3	1	1	.....	21	26	26	26	14	5
112	2	19	3	.....	5	3	.....	.....	22	32	32	32	32	10
113	5	39	2	.....	4	.....	10	.....	42	57	57	57	25	15
114	1	13	....	.....	3	.....	3	.....	17	20	20	20	14	3
115	7	13	6	.....	3	3	1	6	34	39	39	39	23	5
116	3	.....	1	.....	13	.....	6	.....	23	22	22	23	23	.....
117	14	17	6	2	3	2	1	1	31	46	46	30	31	15
118	7	29	5	.....	6	3	.....	2	45	52	52	31	27	7
119	8	29	4	.....	.....	1	1	1	36	44	44	44	28	8
120	3	15	1	.....	5	5	3	2	25	34	34	34	34	9
121	2	32	2	.....	12	9	.....	.....	48	57	57	57	27	9
122	9	22	3	.....	1	3	10	1	35	49	49	49	31	14
123	10	25	1	.....	5	.....	17	.....	58	58	58	58	58	7
124	4	33	10	.....	3	1	8	.....	43	59	59	59	35	16
125	2	44	..	.....	4	.....	1	.....	44	51	51	51	32	7
126	..	14	2	.....	.....	3	13	.....	27	32	32	32	32	5
127	3	.....	....	.....	6	4	5	.....	18	18	18	18	18	.....
128	6	30	8	2	6	8	1	.....	49	61	61	61	29	12
129	2	31	1	.....	5	1	.....	.....	31	40	40	40	25	9
130	..	.....	2	.....	.....	.....	8	.....	10	10	10	10	10	.....
131	..	6	....	.....	.....	.....	2	35	34	43	43	43	43	9
132	9	16	2	.....	5	3	1	2	24	38	38	38	21	14
133	..	12	....	.....	.....	1	2	2	17	17	17	17	10	.....
134	6	11	3	1	4	1	.....	.....	20	26	26	26	18	6
135	9	22	....	.....	.....	2	1	1	25	35	35	35	35	10
136	2	14	1	.....	.....	1	.....	.....	18	18	18	18	5	.....
137	3	28	1	.....	2	2	.....	.....	29	36	36	36	22	7
1	605	2,629	238	16	604	428	485	121	3,989	5,110	5,104	4,833	3,485	1,111
2	614	2,605	242	16	585	379	448	117	3,909	4,979	4,973	4,783	3,394	1,121
3	.....	24	....	.....	19	49	37	4	80	131	131	50	91	.....
4	9	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
5	11.80	51.28	4.64	.31	11.78	8.34	9.46	2.36	77.81	99.68	99.57	94.28	67.98	21.67

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools—Con.	Number of Pupils in the Various Subjects—Concluded							
	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	French	German	Latin
102 Ripley	49	49	49	68	45	63	.....	68
103 Rodney	47	47	47	61	36	43	.....	41
104 Russell	33	14	33	35	22	36	.....	35
105 St. George	34	34	34	44	21	42	.....	42
106 Schomberg	15	15	15	15	11	13	.....	13
107 Scotland	28	28	28	32	17	24	.....	27
108 Southampton	41	41	41	49	23	49	.....	49
109 South Mountain	40	40	40	48	29	48	.....	48
110 South Porcupine	7	7	7	7	1	7	.....	7
111 Spencerville	21	21	21	26	14	24	.....	24
112 Springfield	22	22	22	32	19	29	.....	30
113 Stayner	42	42	42	57	25	22	.....	32
114 Stella	17	17	17	20	14	13	.....	13
115 Stouffville	34	34	34	39	23	36	.....	36
116 Sturgeon Falls	23	23	23	22	22	.....	.....	.....
117 Sutton	31	31	31	46	46	39	.....	37
118 Tamworth	45	45	45	52	27	35	.....	33
119 Tara	36	36	37	44	28	42	.....	41
120 Tavistock	25	25	25	34	17	20	11	27
121 Teeswater	48	48	48	57	27	50	.....	51
122 Thamesville	35	35	35	49	31	48	.....	49
123 Thessalon	51	51	51	58	31	55	.....	58
124 Thornbury	43	43	43	59	35	44	.....	45
125 Thorndale	44	44	44	51	32	39	.....	37
126 Tilbury	27	27	27	32	20	31	.....	28
127 Timmins	18	18	18	18	5	18	.....	18
128 Tottenham	49	49	49	61	29	61	.....	61
129 Warkworth	31	31	31	40	25	34	.....	33
130 Webbwood	10	10	10	10	4	10	.....	10
131 Westboro'	34	34	34	43	24	43	.....	34
132 West Lorne	24	24	24	38	21	38	.....	38
133 Westmeath	17	17	17	17	10	17	.....	14
134 Westport	20	20	20	26	18	25	.....	24
135 Westport (R.C.S.S.)	25	25	25	35	35	34	.....	35
136 Winona	18	18	18	18	5	14	.....	14
137 Wroxeter	29	29	29	36	22	28	.....	31
1 Totals, 1919-20	4,001	3,929	3,986	5,095	2,973	4,263	24	4,358
2 Totals, 1918-19	3,883	3,841	3,841	4,951	2,965	4,074	48	4,170
3 Increases	118	88	145	144	8	189	.....	188
4 Decreases	.....	.....	.....	.....	.....	.....	24	.....
5 Percentages	78.05	76.64	77.76	99.39	57.99	83.16	.46	85.01

SCHOOLS—Concluded

AND IN THE VARIOUS SUBJECTS, ETC.—Concluded

Number of Pupils in the Various Subjects—Concluded

	Zoology	Botany	Chemistry	Physics	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Agriculture
102	49	49	45	68	49	.....	.....	.....	49	68	.....
103	47	47	36	36	47	.....	.....	.....	47	62	.....
104	33	33	22	23	14	.....	.....	.....	33	38	.....
105	33	33	21	43	34	.....	.....	.....	33	44	.....
106	14	14	11	15	15	.....	.....	.....	13	15	.....
107	28	28	17	28	28	.....	.....	.....	28	32	.....
108	41	41	23	49	41	.....	.....	.....	41	49	.....
109	40	40	29	29	40	.....	.....	.....	40	48	.....
110	5	5	2	7	7	.....	.....	.....	7	7	.....
111	21	21	9	26	21	.....	.....	.....	21	26	.....
112	22	22	19	32	22	.....	.....	.....	22	32	.....
113	42	42	25	25	42	.....	.....	.....	42	60	.....
114	17	17	14	20	17	.....	.....	.....	17	20	.....
115	34	34	23	23	34	.....	.....	.....	34	39	.....
116	23	23	12	23	23	.....	.....	.....	23	23	.....
117	31	31	31	46	31	.....	.....	.....	30	46	.....
118	45	45	27	52	45	.....	.....	.....	45	51	.....
119	36	36	28	44	36	.....	.....	.....	36	44	.....
120	25	25	17	34	25	.....	.....	.....	25	33	.....
121	48	48	27	57	48	.....	.....	.....	48	57	.....
122	35	35	31	49	35	.....	.....	.....	35	49	.....
123	51	51	31	58	51	.....	.....	.....	51	58	.....
124	43	43	35	59	24	.....	.....	.....	43	59	.....
125	44	44	32	32	44	.....	.....	.....	44	51	.....
126	27	27	20	32	27	.....	.....	.....	27	32	.....
127	18	18	5	18	18	.....	.....	.....	18	18	.....
128	49	49	29	29	49	49	.....	.....	49	61	.....
129	31	31	25	40	31	.....	.....	.....	31	40	.....
130	10	10	.....	10	10	.....	.....	.....	10	10	.....
131	34	34	43	43	34	.....	.....	.....	34	43	.....
132	24	24	21	38	24	.....	.....	.....	24	38	.....
133	17	17	10	17	17	.....	.....	.....	17	17	.....
134	20	20	18	26	20	.....	.....	.....	20	26	.....
135	25	25	22	35	25	.....	.....	.....	25	35	.....
136	18	18	5	18	18	.....	.....	.....	18	18	.....
137	29	29	22	36	29	.....	.....	.....	29	36	.....
1	3,912	3,912	2,716	4,619	3,799	62	13	13	3,884	5,023	169
2	3,821	3,865	2,785	4,581	3,699	66	.....	.....	3,813	4,854	166
3	91	47	.....	38	100	.....	13	13	71	169	3
4	.....	.....	69	.....	.....	4	.....	.....	.....	.....	.....
5	76.31	76.31	52.98	90.10	74.11	1.20	.25	.25	75.77	97.99	3.29

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

Collegiate Institutes	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	Re- School Fees
	$ c.	$ c.	$ c.	$ c.
1 Barrie	1,168 90	5,318 32	10,060 36	2,259 00
2 Brantford	1,540 25	6,969 96	25,945 50	2,311 00
3 Brockville	1,414 80	3,713 10	13,500 00	766 00
4 Chatham	1,830 50	4,545 47	21,611 23	1,338 33
5 Clinton	978 24	4,568 21	2,000 00	1,175 00
6 Cobourg	1,822 75	4,837 86	12,400 00	.....
7 Collingwood	1,706 70	4,129 72	12,167 14	480 00
8 Fort William	2,513 17	.....	24,810 90	.....
9 Galt	1,584 00	12,029 12	13,100 00	3,792 00
10 Goderich	1,024 68	3,939 17	6,000 00	1,365 05
11 Guelph	1,261 10	.....	18,988 19	3,250 23
12 Hamilton	2,292 17	.....	79,744 00	11,154 74
13 Ingersoll	1,505 81	2,996 00	10,714 98	808 50
14 Kingston	1,535 00	.....	23,466 00	8,873 64
15 Kitchener-Waterloo	1,651 55	3,592 59	18,111 49	3,545 30
16 Lindsay	1,268 50	8,665 76	9,501 55	2,758 25
17 London	1,589 22	.....	63,986 96	6,645 00
18 Morrisburg	956 60	4,110 30	3,912 95	.....
19 Napanee	1,052 09	5,107 37	6,257 63	.....
20 Niagara Falls	1,438 75	2,582 84	20,243 00	.....
21 North Bay	2,666 00	.....	21,510 25	.....
22 Orillia	1,306 06	3,520 18	7,000 00	2,844 00
23 Ottawa	1,649 33	.....	107,113 41	20,202 70
24 Owen Sound	2,273 50	6,385 40	16,405 00	2,487 00
25 Perth	1,123 10	4,465 70	6,176 61	991 01
26 Peterborough	1,072 00	.....	29,500 00	2,666 50
27 Picton	1,353 05	7,894 72	6,000 00	.....
28 Port Arthur	3,397 41	.....	20,000 00	.....
29 Renfrew	1,819 52	9,129 30	8,000 00	22 50
30 St. Catharines	1,112 00	4,272 12	17,011 92	1,902 00
31 St. Mary's	1,099 60	2,314 56	6,700 00	1,730 00
32 St. Thomas	1,728 71	3,693 35	28,000 00	856 00
33 Sarnia	1,161 90	2,762 88	20,545 44	.....
34 Seaforth	1,035 93	4,913 00	3,155 61	1,433 20
35 Smith's Falls	1,875 70	1,902 37	13,602 40	526 00
36 Stratford	2,476 23	3,051 20	28,934 21	4,030 25
37 Strathroy	1,043 75	3,683 02	4,800 00	1,368 00
38 Toronto, Harbord	1,546 66	.....	40,000 45	6,377 00
39 Toronto, Humberside	1,137 50	.....	45,563 04	4,705 50
40 Toronto, Jarvis	1,518 00	.....	45,342 02	4,596 47
41 Toronto, Malvern	1,104 50	.....	25,766 41	2,434 48
42 Toronto, Oakwood	1,695 50	.....	56,877 74	6,497 00
43 Toronto, Parkdale	1,097 50	.....	39,688 70	4,582 00
44 Toronto, Riverdale	1,855 00	.....	44,416 34	3,419 00
45 Vankleek Hill	1,071 15	7,213 03	3,200 00	74 00
46 Windsor	1,304 50	.....	27,489 34	13,402 75
47 Woodstock	1,825 70	5,636 74	15,200 00	2,481 45
Totals	72,484 58	147,943 36	1,084,520 77	140,150 85

AND HIGH SCHOOLS

STATEMENT

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodations
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	.....	2,674 54	21,481 12	12,791 82	1,916 27	158 73
2	.....	1,703 34	38,470 05	29,661 03	250 00	1,957 42
3	.....	3,957 85	23,351 75	14,825 62	.....	3,434 87
4	.....	2,063 90	31,389 43	19,913 71	.....	.....
5	.....	1,909 18	10,630 63	8,380 00	.....	486 98
6	.....	4,672 03	23,732 64	12,900 00	1,045 82	1,044 04
7	.....	337 47	18,821 03	13,266 50	.....	141 68
8	120,775 26	85 30	148,184 63	20,649 47	115,527 94	180 44
9	.....	2,349 42	32,854 54	21,991 20	314 80	1,525 67
10	.....	2,909 61	15,238 51	10,299 00	581 50	454 45
11	.....	265 40	23,764 92	19,380 00	30 25	.....
12	.....	90 76	93,281 67	59,905 07	6,612 36	2,040 40
13	.....	1,776 74	17,802 03	10,971 30	971 90	546 54
14	.....	2,274 88	36,149 52	29,340 00	962 32	717 08
15	.....	5,257 09	32,158 02	19,570 89	21 10	411 86
16	.....	1,828 67	24,022 73	18,301 70	686 00	742 23
17	.....	24,594 60	96,815 78	58,616 50	3,826 53	2,788 08
18	.....	2,816 42	11,796 27	7,331 08	.....	41 25
19	.....	6,051 24	18,468 33	9,680 00	487 50	143 06
20	.....	37,882 79	62,147 38	19,477 45	34,002 49	705 61
21	.....	2,544 28	26,720 53	13,952 86	282 26	230 73
22	.....	4,257 28	18,927 52	13,487 29	1,298 28	.....
23	40,000 00	2,124 58	171,090 02	80,531 00	44,297 45	2,653 96
24	.....	4,023 87	31,574 77	20,652 00	100 38	1,024 92
25	.....	3,156 13	15,912 55	8,717 50	478 43	467 50
26	.....	1,266 48	34,504 98	25,955 00	.....	1,389 40
27	.....	7,621 39	22,869 16	11,346 01	43 95	39 13
28	.....	2,888 34	26,285 75	15,515 68	228 02	370 47
29	.....	636 25	19,607 57	13,927 97	212 53	669 22
30	.....	2,243 15	26,541 19	19,910 00	101 18	664 93
31	.....	557 45	12,401 61	9,500 57	232 42	186 49
32	.....	508 92	34,786 98	25,632 24	827 00	1,256 94
33	1,255 42	3,793 14	29,518 78	18,971 39	889 80	199 11
34	.....	4,271 78	14,809 52	9,148 00	.....	233 64
35	.....	506 76	18,413 23	12,668 20	.....	838 31
36	.....	996 14	39,488 03	27,885 48	.....	1,134 94
37	.....	636 21	11,530 98	8,600 00	180 88	.....
38	.....	158,604 19	206,528 30	47,711 80	1,816 04	3,884 19
39	.....	11,668 97	63,075 01	41,305 50	74 05	2,923 73
40	.....	185 79	51,642 28	37,806 00	6 36	4,591 62
41	.....	2,161 70	31,467 09	23,010 00	54 75	805 31
42	.....	13,054 50	78,124 74	46,607 81	5,805 75	1,878 48
43	.....	37,290 00	82,658 20	38,448 00	8,380 34	1,334 72
44	.....	2,334 65	52,024 99	36,537 50	48 84	2,113 92
45	.....	4,532 19	16,090 37	8,040 00	.....	180 67
46	5,750 52	12,256 53	60,203 64	34,904 69	3,288 02	2,045 42
47	.....	4,460 96	29,604 85	17,967 72	939 02	1,470 51
	167,781 20	394,082 86	2,006,963 62	1,085,992 55	236,827 53	50,108 65

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

Collegiate Institutes—Continued	Expenditure— Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
1 Barrie	514 72	.....	3,801 82
2 Brantford	710 54	129 95	5,761 11
3 Brockville	.....	31 70	3,955 44
4 Chatham	763 11	8 15	9,279 56
5 Clinton	412 77	.....	1,350 88
6 Cobourg	.....	206 77	3,018 90
7 Collingwood	15 19	46 79	5,313 29
8 Fort William	211 41	1,585 26	6,368 05
9 Galt	277 79	25 80	7,203 99
10 Goderich	115 19	.....	2,466 02
11 Guelph	218 54	.....	4,136 13
12 Hamilton	608 33	174 43	11,939 46
13 Ingersoll	27 95	81 05	3,403 44
14 Kingston	772 31	.....	4,357 81
15 Kitchener-Waterloo	623 50	409 42	9,057 09
16 Lindsay	286 33	.....	3,704 47
17 London	971 08	107 06	30,506 53
18 Morrisburg	.....	.....	1,770 45
19 Napanee	40 08	.....	2,549 66
20 Niagara Falls	526 33	20 60	5,786 90
21 North Bay	205 24	.....	8,132 47
22 Orillia	.....	.....	3,977 95
23 Ottawa	561 97	.....	26,903 13
24 Owen Sound	531 17	102 24	3,107 36
25 Perth	.....	.....	2,842 94
26 Peterborough	762 87	32 27	5,046 06
27 Picton	389 44	11 87	3,194 48
28 Port Arthur	676 87	720 35	7,897 87
29 Renfrew	.....	254 50	3,481 80
30 St. Catharines	578 18	.....	4,155 38
31 St. Mary's	56 13	.....	1,913 88
32 St. Thomas	678 50	116 25	5,943 96
33 Sarnia	164 59	.....	6,192 01
34 Seaforth	.....	.....	3,304 24
35 Smith's Falls	.....	.....	3,845 62
36 Stratford	740 56	100 00	8,082 82
37 Strathroy	333 08	.....	1,975 75
38 Toronto, Harbord	104 01	7 90	9,376 56
39 Toronto, Humberside	90 83	30 98	18,649 92
40 Toronto, Jarvis	64 19	11 86	9,162 25
41 Toronto, Malvern	210 78	22 76	7,363 49
42 Toronto, Oakwood	140 74	4,148 76	19,543 20
43 Toronto, Parkdale	9 35	2 50	5,573 63
44 Toronto, Riverdale	68 49	4,441 65	6,479 94
45 Vankleek Hill	266 12	116 45	1,405 28
46 Windsor	.....	.....	19,965 51
47 Woodstock	.....	65 09	9,162 51
Totals	13,728 28	13,012 41	332,411 01

AND HIGH SCHOOLS—Continued

STATEMENT—Continued

Continued

	Total Expenditure		Charges per year for Tuition
	$	c.	
1	19,183	36	$10.
2	38,470	05	Res. free ; Co. $10; others $30.
3	22,247	63	$5.
4	29,964	53	Res. free ; non-res. $10.
5	10,630	63	Lower school $6; others $10.
6	18,215	53	Free.
7	18,783	45	Res. free; non-res. $10.
8	144,522	57	Free.
9	31,339	25	Co. $10; res. and other Cos. $14.
10	13,916	16	F. I $6 ; II $8; others $10.
11	23,764	92	Res. free; non-res. $10.
12	81,280	05	Res. 1st yr. $2.50, other years $10 ; non-res. $55.
13	16,002	18	Res. F. I free; all others $7.50.
14	36,149	52	Res. I free, other Fs. $15; Co. $5 ; others, $30.
15	30,093	86	Res. $10; non-res. $15.
16	23,720	73	Res. $7.50 to $10; non-res. $7.50 to $20.
17	96,815	78	Res. 1 year free, other yrs. and Co. $10; others $30.
18	9,142	78	Free.
19	12,900	30	Free.
20	60,519	38	Free.
21	22,803	56	Free.
22	18,763	52	$10.
23	154,947	51	Res. I & II $10; III $20 ; IV & V $25; non-res. I, II & III $45; IV & V $50.
24	25,518	07	Res. I free, II $8 ; others $12 ; non-res. $10.
25	12,506	37	Co. $10; others $40.
26	33,185	60	Res. I free, II $5, III & IV $8, V $10; non-res. $25.
27	15,029	88	Free.
28	25,409	26	Free.
29	18,546	02	Res. free ; Co. free ; others $25.
30	25,409	67	$5.
31	11,889	49	Res. 1st year, $5; all others $10.
32	34,454	89	Res. free; non-res. $10.
33	26,416	90	Free.
34	12,685	88	F. I $6; II $8 ; others, $10.
35	17,352	13	Res. free; non-res. $10.
36	37,943	80	Res. 1st yr. free; all others $10.
37	11,089	71	Res. 1st yr. free; all others $10.
38	62,900	50	
39	63,075	01	
40	51,642	28	
41	31,467	09	Res. I free, II $9, III $15, IV $21, V $27; non-res. cost per pupil.
42	78,124	74	
43	53,748	54	
44	49,690	34	
45	10,008	52	Free to Province; others $20.
46	60,203	64	Res. and Co. free.
47	29,604	85	Res. 1st yr. free; all others $7.50.
	1,732,080	43	18 free; 29 not free.

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

High Schools	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees Re-
	$ c.	$ c.	$ c.	$ c.
1 Alexandria	747 43	741 02	6,172 00	.....
2 Alliston	560 41	1,620 21	2,000 00	588 50
3 Almonte	602 41	1,720 05	3,211 38	630 75
4 Amherstburg	527 00	1,386 96	2,600 00	75 00
5 Arnprior	826 15	2,504 36	5,599 47	25 00
6 Arthur	712 32	2,668 92	1,650 00	722 50
7 Athens	834 96	3,951 89	2,800 00	319 50
8 Aurora	738 47	3,033 84	3,500 00	955 00
9 Avonmore	571 99	644 56	3,750 00	.....
10 Aylmer	773 02	3,785 47	1,950 00	841 00
11 Beamsville	628 57	5,006 74	4,151 29	.....
12 Belleville	2,430 81	3,924 12	22,899 48	.....
13 Bowmanville	743 59	2,458 57	4,350 00	316 05
14 Bracebridge	1,184 94	.....	3,850 00	387 30
15 Bradford	588 82	1,635 04	1,100 00	366 50
16 Brampton	1,139 79	3,758 76	6,500 00	1,617 40
17 Brighton	539 64	539 64	3,200 00	.....
18 Burlington	543 90	543 90	1,201 51	363 00
19 Caledonia	612 38	2,824 99	500 00	571 06
20 Campbellford	713 96	3,373 19	5,280 00	.....
21 Carleton Place	619 61	1,770 59	4,532 00	452 00
22 Cayuga	652 55	3,233 69	2,000 00	.....
23 Chatsworth	437 43	437 43	2,532 03	201 25
24 Chesley	607 94	2,019 84	2,000 00	1,429 25
25 Chesterville	540 22	2,042 46	2,200 00	.....
26 Colborne	508 77	1,670 98	1,800 00	.....
27 Cornwall	1,197 50	7,260 19	8,000 00	.....
28 Deseronto	672 68	907 48	3,800 00	.....
29 Dundalk	515 81	1,654 98	1,800 00	492 00
30 Dundas	880 06	2,347 32	5,577 00	822 00
31 Dunnville	943 27	3,336 16	4,200 00	.....
32 Durham	612 85	1,949 60	1,592 00	818 45
33 Dutton	588 28	3,249 11	750 00	812 00
34 Elora	409 90	1,285 59	2,650 00	354 00
35 Essex	1,040 61	4,457 00	4,300 00	.....
36 Exeter	528 40	1,066 80	3,000 00	432 50
37 Fergus	580 80	2,373 97	2,450 00	586 00
38 Flesherton	582 89	582 82	3,450 00	282 00
39 Forest	633 62	2,667 70	2,000 00	.....
40 Fort Frances	1,041 80	.....	7,200 00	.....
41 Gananoque	805 51	2,050 45	6,377 37	163 00
42 Georgetown	801 27	3,304 31	3,363 81	1,114 65
43 Glencoe	521 20	2,217 09	.....	576 00
44 Gravenhurst	1,179 28	.....	3,545 00	264 95
45 Grimsby	601 34	3,188 75	1,784 19	.....
46 Hagersville	610 21	2,881 36	2,000 00	.....
47 Haileybury	1,498 70	.....	2,500 00	2,427 65
48 Harriston	745 65	1,988 59	2,197 25	730 00
49 Hawkesbury	597 28	1,692 01	3,487 22	.....
50 Iroquois	623 14	3,343 23	1,775 00	.....
51 Kemptville	709 68	3,286 39	2,750 00	405 00
52 Kenora	1,678 76	.....	10,911 99	.....

AND HIGH SCHOOLS—Continued

STATEMENT—Continued

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodation
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	.....	997 08	8,657 53	5,660 00	10 09	.....
2	.....	885 92	5,655 04	3,630 00	.....	.....
3	.....	1,800 32	7,964 91	5,130 00	.....	.....
4	.....	809 64	5,398 60	3,530 50	600 00	24 05
5	.....	2,839 09	11,794 07	7,419 09	177 42	441 43
6	.....	1,282 25	7,035 99	4,895 15	.....	38 44
7	.....	3,634 87	11,541 22	6,440 00	.....	147 18
8	.....	740 01	8,967 32	5,860 00	.....	204 18
9	.....	1,505 88	6,472 43	3,420 00	.....	75 90
10	.....	688 92	8,038 41	5,900 00	.....	95 95
11	.....	1,152 67	10,939 27	4,537 50	250 00	16 47
12	.....	802 24	30,056 65	24,231 47	.....	247 56
13	.....	493 34	8,361 55	5,616 52	.....	381 05
14	.....	31 55	5,453 79	4,828 00	215 51	.....
15	.....	311 26	4,001 62	3,290 00	.....	219 27
16	.....	75 78	13,091 73	9,480 00	649 00	.....
17	.....	802 91	5,082 19	3,640 00	.....	41 19
18	.....	.....	2,652 31	2,188 71	15 52	25 60
19	.....	1,785 24	6,293 67	4,840 00	.....	182 30
20	.....	1,023 71	10,390 86	7,227 00	.....	245 55
21	.....	88 52	7,462 72	5,152 92	7 00	66 02
22	.....	802 18	6,688 42	4,890 00	.....	37 12
23	.....	582 64	4,190 78	2,570 00	.....	13 73
24	.....	521 51	6,578 54	4,810 00	1,120 00	107 84
25	.....	785 34	5,568 02	3,555 20	452 90	473 10
26	.....	3,398 03	7,377 78	2,593 66	95 00	89 35
27	.....	4,716 35	21,174 04	13,720 00	.....	224 17
28	.....	213 01	5,593 17	3,633 33	.....	196 63
29	.....	228 14	4,690 93	3,328 48	.....	241 51
30	.....	910 82	10,537 20	7,731 48	581 37	39 91
31	.....	2,804 29	11,283 72	6,809 87	118 88	97 92
32	.....	1,265 77	6,238 67	3,981 11	81 40	2 00
33	.....	2,257 31	7,656 70	4,980 00	.....	119 00
34	.....	59 51	4,759 00	3,020 00	.....	508 38
35	.....	2,037 72	11,835 33	7,020 91	.....	388 18
36	.....	202 83	5,230 53	3,539 64	258 18	.....
37	.....	1,482 27	7,473 04	4,659 00	.....	410 33
38	.....	969 25	5,866 96	3,370 00	.....	90 37
39	.....	660 96	5,962 28	3,900 00	202 00	.....
40	.....	867 03	9,108 83	4,770 00	1,300 00	.....
41	.....	1,042 82	10,439 15	5,360 00	2,494 20	306 84
42	.....	119 68	8,703 72	6,734 75	181 23	161 72
43	.....	1,206 59	4,520 88	3,165 00	.....	84 45
44	.....	116 89	5,106 12	3,328 75	.....	532 14
45	.....	1,513 90	7,088 18	3,800 00	.....	21 14
46	.....	456 79	5,948 36	4,046 00	.....	75 47
47	.....	8,368 61	14,794 96	5,782 05	.....	332 70
48	.....	2,096 36	7,757 85	4,960 00	.....	1,108 65
49	.....	14 44	5,790 95	3,698 09	39 83	.....
50	.....	3,263 26	9,004 63	4,700 00	.....	.....
51	.....	1,210 96	8,362 03	5,890 00	.....	131 95
52	.....	241 29	12,832 04	8,246 13	256 00	.....

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

High Schools—Continued	Expenditure— Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
1 Alexandria	.....	.....	1,732 21
2 Alliston	.....	.....	1,596 45
3 Almonte	.....	.....	1,867 79
4 Amherstburg	122 57	.....	695 03
5 Arnprior	65 02	.....	1,817 91
6 Arthur	30 38	57 70	1,818 21
7 Athens	.....	65 28	1,549 01
8 Aurora	283 50	.....	1,305 66
9 Avonmore	180 94	.....	1,645 08
10 Aylmer	105 80	.....	1,423 65
11 Beamsville	300 00	1,694 78	3,252 42
12 Belleville	367 54	190 64	5,019 44
13 Bowmanville	72 75	.....	2,152 96
14 Bracebridge	113 36	.....	193 53
15 Bradford	.....	.....	483 55
16 Brampton	268 92	.....	2,565 31
17 Burlington	84 71	.....	1,206 10
18 Brighton	108 13	.....	314 35
19 Caledonia	153 59	.....	1,117 78
20 Campbellford	166 82	.....	1,536 26
21 Carleton Place	7 80	.....	1,121 19
22 Cayuga	39 96	.....	1,216 29
23 Chatsworth	43 84	.....	947 63
24 Chesley	116 55	.....	269 68
25 Chesterville	.....	7 60	1,074 82
26 Colborne	.....	.....	1,183 18
27 Cornwall	.....	.....	3,509 95
28 Deseronto	283 06	.....	1,478 90
29 Dundalk	74 44	.....	746 71
30 Dundas	.....	.....	2,125 81
31 Dunnville	221 11	.....	1,491 65
32 Durham	207 60	.....	1,378 27
33 Dutton	.....	.....	928 79
34 Elora	193 61	.....	1,001 28
35 Essex	.....	81 18	957 76
36 Exeter	20 75	.....	1,170 86
37 Fergus	35 00	.....	916 74
38 Flesherton	18 32	.....	1,234 94
39 Forest	88 80	.....	800 20
40 Fort Frances	1,188 57	.....	1,850 26
41 Gananoque	278 86	.....	1,999 25
42 Georgetown	142 18	.....	1,483 84
43 Glencoe	.....	.....	936 17
44 Gravenhurst	20 40	.....	1,215 41
45 Grimsby	.....	.....	3,267 04
46 Hagersville	48 50	.....	1,185 83
47 Haileybury	.....	.....	2,090 05
48 Harriston	177 29	.....	1,438 33
49 Hawkesbury	276 39	.....	1,776 64
50 Iroquois	23 40	.....	2,275 65
51 Kemptville	68 75	.....	864 52
52 Kenora	616 26	.....	3,713 65

AND HIGH SCHOOLS—Continued

STATEMENT—Continued

Continued	Total Expenditure	Charges per year for Tuition
	$ c.	
1	7,402 30	Res. free; non-res. $20.
2	5,226 45	Res. $5; non-res. $10.
3	6,997 79	Res. $2.50; non-res. $12.50.
4	4,972 15	Res. free; non-res. $10.
5	9,920 87	Res. free; non-res. $25.
6	6,839 88	$10.
7	8,201 47	Res. free; Co. $5; others $30.
8	7,653 34	$10.
9	5,321 92	Free.
10	7,523 40	Res. 1st yr. $5; all others $10.
11	10,051 17	Free.
12	30,056 65	Res. free; non-res. $25.
13	8,223 28	Res. F. I free, II $6; other Fs. $7.50; non-res. free.
14	5,350 40	Res. free; non-res. I $10, II $12.50, III $15.
15	3,992 82	F. I free; II $10; others $10.50.
16	12,963 23	$10.
17	4,972 00	Free.
18	2,652 31	$10.
19	6,293 67	Res. free; non-res. $15.
20	9,175 63	Free.
21	6,354 93	Res. free; non-res. $10.
22	6,183 37	Free.
23	3,575 20	Res. 1st yr. free; all others $10.
24	6,424 07	F. I $10, II $15, III $20, IV $30.
25	5,563 62	Free.
26	3,961 19	Free.
27	17,454 12	Free.
28	5,591 92	Free.
29	4,391 14	$10.
30	10,478 57	Res. 1st yr. free; all others $10.
31	8,739 43	Free.
32	5,650 38	Res. $7.50; non-res. $10.
33	6,027 79	$10.
34	4,723 27	Res. $5; non-res. $10.
35	8,448 03	Free.
36	4,989 43	Res. 1st yr. free; all others $10.
37	6,021 07	Res. free; non-res. $10.
38	4,713 63	Res. F. I free, II $5, III $7.50; non-res. $10.
39	4,991 00	Free.
40	9,108 83	Free.
41	10,439 15	Res. free; non-res. $5.
42	8,703 72	$10.
43	4,185 62	$10.
44	5,096 70	F. I $5; others $10.
45	7,088 18	Free.
46	5,355 80	Free.
47	8,204 80	Res. free; non-res. $30.
48	7,684 27	Res. F. I free; all others $10.
49	5,790 95	Free.
50	6,999 05	Free.
51	6,955 22	Res. free; Co. & adjoining Cos. $5; others $25.
52	12,832 04	Free.

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

High Schools—Continued	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	Re- School Fees
	$ c.	$ c.	$ c.	$ c.
53 Kincardine	944 57	4,170 72	2,705 02	1,266 00
54 Leamington	976 79	3,821 62	6,000 00	.....
55 Listowel	938 35	6,593 30	2,550 00	1,431 50
56 Lucan	646 96	2,633 30	1,500 00	650 00
57 Madoc	633 88	3,971 79	2,000 00	.....
58 Markdale	430 78	430 78	1,833 28	431 00
59 Markham	620 50	3,661 78	1,000 00	939 00
60 Meaford	1,076 09	3,201 94	5,000 00	842 00
61 Midland	722 36	1,562 53	7,446 00	753 31
62 Milton	537 75	537 75	1,539 52	1,003 00
63 Mitchell	693 18	1,311 11	3,500 00	714 25
64 Morewood	482 44	498 29	3,806 34	.....
65 Mount Forest	662 93	1,802 68	2,500 00	741 25
66 Newburgh	507 48	3,282 65	500 00	.....
67 Newcastle	433 12	974 78	1,259 58	.....
68*Newmarket	1,732 75	4,099 58	2,500 00	1,715 80
69 Niagara	436 15	800 00	1,425 00	.....
70 Niagara Falls South	1,157 77	1,986 35	11,740 79	.....
71 Norwood	536 77	1,946 22	2,197 32	386 00
72 Oakville	2,258 69	2,750 00	3,987 73	622 03
73 Omemee	431 82	942 82	1,305 75	162 00
74 Orangeville	923 15	3,204 85	5,500 00	1,219 50
75 Oshawa	1,100 38	1,369 32	10,487 52	125 65
76 Paris	748 02	2,448 28	4,200 00	122 82
77 Parkhill	574 91	2,213 14	2,000 00	950 75
78 Parry Sound	1,309 84	.....	4,900 00	58 00
79 Pembroke	1,128 07	2,844 39	12,164 41	.....
80 Penetanguishene	712 55	712 55	4,523 65	.....
81 Petrolia	625 83	.....	4,000 00	.....
82 Plantagenet	485 85	988 99	3,400 00	.....
83 Port Dover	463 73	939 77	1,827 08	.....
84 Port Elgin	510 15	1,618 69	1,700 00	449 62
85 Port Hope	945 71	4,367 14	5,985 55	784 50
86 Port Perry	1,612 10	3,941 33	2,797 80	400 15
87 Port Rowan	424 44	1,502 62	681 79	.....
88 Prescott	720 60	1,072 72	5,386 55	124 50
89 Richmond Hill	550 43	2,008 62	1,000 00	698 00
90 Ridgetown	741 78	2,935 55	2,800 00	838 00
91 Rockland	510 30	2,357 65	1,193 27	.....
92 Sault Ste. Marie	2,737 31	.....	15,435 45	2,611 00
93 Shelburne	533 54	1,703 54	2,219 58	458 50
94 Simcoe	829 09	4,497 29	4,041 08	.....
95 Smithville	538 41	2,454 93	1,650 00	.....
96 Stirling	602 38	2,688 49	1,400 88	.....
97 Streetsville	510 88	1,725 00	1,050 00	324 00
98 Sudbury	2,152 50	.....	13,298 26	371 00
99 Sydenham	716 78	5,900 00	.....	582 00
100 Thorold	546 82	1,547 98	4,800 00	.....
101 Tillsonburg	807 13	2,180 04	4,000 00	866 50
102 Toronto, Commerce	3,077 10	.....	81,805 00	5,596 38
103 Toronto, North	1,110 55	.....	20,880 30	1,995 00
104 Trenton	739 56	2,461 51	6,750 00	.....

*Legislative grant for 1919; other items are for 1918; no report received for 1919.

AND HIGH SCHOOLS—Continued

STATEMENT—Continued

ceipts			Expenditure		
Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodation
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
53	1,862 74	10,949 05	7,494 00	.....	136 00
54	2,205 04	13,003 45	8,055 60	.....	383 79
55	149 86	11,663 01	7,287 05	988 65	362 84
56	91 98	5,522 24	4,057 43	.....	240 31
57	1,315 13	7,920 80	5,260 00	407 95	63 05
58	1,952 53	5,078 37	2,430 00	100 00	64 69
59	922 45	7,143 73	5,158 00	.....	191 15
60	648 47	10,768 50	8,071 09	.....	.....
61	708 10	11,192 30	6,540 00	.....	373 63
62	86 98	3,705 00	3,470 00	.....	.....
63	86 92	6,305 46	4,695 00	.....	188 66
64	3,681 96	8,469 03	2,840 00	383 36	.....
65	116 11	5,822 97	4,134 42	.....	65 05
66	2,406 54	6,696 67	3,310 00	.....	44 50
67	100 45	2,767 93	2,289 00	.....	59 83
68	5,092 24	15,140 37	8,561 47	286 42	98 90
69	391 67	3,052 82	2,514 63	.....	27 35
70	9,155 07	24,039 98	7,706 99	1,977 53	622 92
71	1,038 53	6,104 84	3,640 00	.....	271 64
72	2,217 00	11,835 45	5,740 00	.....	371 64
73	124 83	2,967 22	2,122 70	.....	257 46
74	780 04	11,627 54	7,197 15	.....	29 45
75	2,943 26	16,026 13	10,350 00	59 50	204 54
76	1,289 54	8,808 66	5,760 00	40 64	76 17
77	224 61	5,963 41	4,403 50	.....	219 14
78	.....	6,267 84	4,222 00	.....	38 64
79	783 93	16,920 80	11,754 07	191 00	381 99
80	194 63	6,143 38	4,450 00	.....	116 15
81	2,099 37	6,725 20	5,300 00	.....	158 55
82	3,492 95	8,367 79	3,120 00	250 00	.....
83	143 82	3,374 40	2,496 40	68 50	.....
84	609 71	4,888 17	3,558 95	.....	.....
85	53 00	12,135 90	8,473 50	.....	567 27
86	341 39	9,092 77	6,495 00	394 92	154 99
87	13 00	2,621 85	2,050 00	.....	153 44
88	182 99	7,487 36	5,342 61	90 13	120 30
89	955 96	5,213 01	3,827 60	.....	189 10
90	652 88	7,968 21	6,170 00	281 80	55 34
91	1,936 80	5,998 02	3,060 00	714 46	92 26
92	1,813 78	22,597 54	16,002 41	346 50	277 96
93	100 32	5,015 48	3,534 33	.....	549 73
94	270 68	9,638 14	7,295 00	.....	557 00
95	4,050 62	8,693 96	3,540 00	.....	42 01
96	118 32	4,810 07	3,400 00	1,174 18	.....
97	338 57	3,948 45	3,340 00	.....	.....
98	6,690 81	22,512 57	9,810 00	1,103 33	2,259 02
99	173 45	7,372 23	5,480 00	.....	72 90
100	243 85	7,138 65	4,023 94	1,378 30	61 66
101	665 65	8,519 32	6,890 00	.....	2 00
102	25,394 96	115,873 44	59,600 10	3,234 50	3,006 86
103	10,880 04	34,865 89	17,777 00	14 20	1,119 50
104	5,891 90	15,842 97	6,970 64	.....	395 33

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

High Schools—Concluded	Expenditure— Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
53 Kincardine	927 25	54 10	2,337 70
54 Leamington	78 98	20 65	1,695 91
55 Listowel	653 42	.....	1,792 41
56 Lucan	66 78	.....	1,093 07
57 Madoc	212 97	.....	1,166 71
58 Markdale	.....	.....	750 22
59 Markham	83 99	.....	925 08
60 Meaford	177 04	.....	1,478 04
61 Midland	.....	.....	1,978 05
62 Milton	.....	.....	235 00
63 Mitchell	29 27	.....	1,378 81
64 Morewood	.....	.....	889 51
65 Mount Forest	.....	.....	1,246 11
66 Newburgh	70 04	.....	794 64
67 Newcastle	.....	.....	419 10
68*Newmarket	392 49	.....	4,273 91
69 Niagara	74 64	.....	426 49
70 Niagara Falls South	549 79	335 95	2,085 87
71 Norwood	.....	.....	1,121 02
72 Oakville	582 82	394 59	1,640 43
73 Omemee	16 06	69 00	571 00
74 Orangeville	854 54	.....	1,883 88
75 Oshawa	189 77	.....	2,812 86
76 Paris	153 10	.....	1,184 75
77 Parkhill	10 56	.....	1,181 44
78 Parry Sound	.....	.....	1,853 49
79 Pembroke	112 94	.....	3,355 42
80 Penetanguishene	.....	.....	1,512 36
81 Petrolia	.....	.....	1,266 65
82 Plantagenet	.....	.....	1,466 72
83 Port Dover	141 16	.....	668 34
84 Port Elgin	236 56	.....	1,010 55
85 Port Hope	135 43	86 84	2,121 06
86 Port Perry	.....	901 92	1,145 94
87 Port Rowan	48 41	.....	370 00
88 Prescott	179 72	.....	1,650 29
89 Richmond Hill	188 07	.....	1,008 24
90 Ridgetown	67 66	.....	1,290 55
91 Rockland	36 36	.....	720 59
92 Sault Ste. Marie	.....	.....	5,204 26
93 Shelburne	1 00	.....	880 62
94 Simcoe	361 19	.....	1,424 95
95 Smithville	.....	.....	1,012 12
96 Stirling	.....	.....	575 44
97 Streetsville	118 96	.....	489 49
98 Sudbury	200 00	.....	3,502 04
99 Sydenham	.....	.....	300 00
100 Thorold	.....	.....	1,090 68
101 Tillsonburg	60 68	.....	1,532 81
102 Toronto, Commerce	297 77	16 45	32,917 69
103 Toronto, North	120 60	13 04	15,821 55
104 Trenton	1,106 92	.....	3,159 26

AND HIGH SCHOOLS—Continued

STATEMENT—Continued

Continued

	Total Expenditure	Charges per year for Tuition
	$ c.	
53	10,949 05	Res. $8; non-res. $10.
54	10,234 93	Free.
55	11,084 37	Res. F. I $7; all others $10.
56	5,457 59	$10.
57	7,110 68	Free.
58	3,344 91	$10.
59	6,358 22	$10.
60	9,726 17	Res. I. $5; other F's $8; non-res. $10.
61	8,891 68	Res. $5; non-res. $10.
62	3,705 00	$10.
63	6,291 74	Res. $6; non-res. 10.
64	4,112 87	Free.
65	5,445 58	Res. F. I free; all others $10.
66	4,219 18	Free.
67	2,767 93	Free.
68	13,613 19	$10.
69	3,043 11	Free.
70	13,279 05	Free.
71	5,032 66	$6.
72	8,729 48	Res. $5; non-res. $8.
73	3,036 22	Res. free; non-res. $10.
74	9,965 02	$10.
75	13,616 67	Res. free; non-res. $25.
76	7,214 66	Res. Brant, Waterloo and Oxford Cos. free; others $20.
77	5,814 64	Res. L. Sch. $6; M & U Schs. $8; non-res. $10.
78	6,114 13	Res. free; non-res. $10.
79	15,795 42	Free.
80	6,078 51	Free.
81	6,725 20	Free.
82	4,836 72	Free.
83	3,374 40	Free.
84	4,806 06	$6.50
85	11,384 10	Res. $9; non-res. free.
86	9,092 77	Res. F. I, and Durham Co. free; others $7.
87	2,621 85	Free.
88	7,383 05	Res free: non-res. $5.
89	5,213 01	$10.
90	7,865 35	Res. $6, non-res. $10.
91	4,623 67	Free.
92	21,831 13	$10.
93	4,965 68	Res. F. I free; all others $10.
94	9,638 14	Res. free; non-res. $10.
95	4,594 13	Free.
96	5,149 62	Free.
97	3,948 45	$10.
98	16,874 39	Res. free; non-res. $10.
99	5,852 90	L. and M. Schools $5; U. School $12
100	6,554 58	Free.
101	8,485 49	L. & M. Schools $7.50; U. School $10.
102	99,073 37	Res. 1st & 2nd yrs. free. 3rd & 4th yrs. $15.
103	34,865 89	Res. F. I free; II $9; III $15; IV $21; V $27.
104	11,632 15	Free.

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

High Schools—Continued	Legislative Grants	Municipal Grants (County)	Municipal Grants (local)	Re-School Fees
	$ c.	$ c.	$ c.	$ c.
105 Tweed	599 12	2,931 73	4,247 41	.....
106 Uxbridge	694 86	3,231 49	2,800 00	728 50
107 Vienna	412 38	737 75	700 00	.....
108 Walkerton	783 13	2,071 66	4,200 00	595 00
109 Wallaceburg	694 62	2,228 49	4,900 00	242 00
110 Wardsville	413 01	1,028 96	1,167 03	220 50
111 Waterdown	517 14	917 14	3,200 00	593 75
112 Waterford	550 76	2,063 75	1,800 00	.....
113 Watford	706 71	303 25	2,400 00	279 00
114 Welland	1,003 21	5,239 00	8,000 00	.....
115 Weston	827 61	2,839 65	6,000 00	1,310 00
116 Whitby	2,227 42	2,701 60	4,000 00	340 25
117 Wiarton	678 48	2,439 22	1,500 00	544 19
118 Williamstown	730 59	5,087 16	.....	.....
119 Winchester	655 50	2,359 82	3,550 00	.....
120 Wingham	994 78	4,120 06	3,200 00	877 60
1 Totals, High Schools	98,327 91	265,353 23	542,628 93	56,105 06
2 Totals, Collegiate Institutes	72,484 58	147,943 36	1,084,520 77	140,150 85
3 Grand Totals, 1919	170,812 49	413,296 59	1,627,149 70	196,255 91
4 Grand Totals, 1918	162,816 83	425,253 24	1,570,302 77	166,640 90
5 Increases	7,995 66	.....	56,846 93	29,615 01
6 Decreases	.....	11,956 65	.....	.....
7 Percentages	5.39	13.05	51.39	6.20

AND HIGH SCHOOLS—Continued

STATEMENT—Continued

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodation
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
105	.....	782 29	8,560 55	3,640 00	.....	27 34
106	.....	327 55	7,782 40	6,180 00	.....	161 67
107	.....	1,068 98	2,919 11	2,040 68	26 95	.....
108	.....	1,631 43	9,281 22	6,013 34	183 00	80 51
109	.....	1,570 58	9,635 69	5,453 29	659 50	29 31
110	.....	49 24	2,878 74	2,200 00	64 13	12 30
111	.....	41 00	5,269 03	4,070 00	.....	27 25
112	.....	1,686 95	6,101 46	3,581 00	.....	.....
113	.....	4,421 61	8,110 57	5,310 00	918 75	28 40
114	.....	1,893 81	16,136 02	9,463 31	.....	486 55
115	.....	2,095 37	13,072 63	7,297 30	.....	81 34
116	.....	2,107 21	11,376 48	7,287 02	.....	594 00
117	.....	1,053 65	6,215 54	4,296 70	42 67	30 52
118	.....	748 28	6,566 03	5,075 00	300 00	.....
119	.....	2,070 60	8,635 92	5,160 00	119 28	95 70
120	.....	1,441 82	10,634 26	7,960 00	.....	161 15
1	.....	196,843 55	1,159,258 68	715,609 53	24,905 68	24,787 49
2	167,781 20	394,082 86	2,006,963 62	1,085,992 55	236,827 53	50,108 65
3	167,781 20	590,926 41	3,166,222 30	1,801,602 08	261,733 21	74,896 14
4	.....	530,520 40	2,855,534 14	1,627,475 66	246,012 88	58,428 62
5	.....	60,406 01	310,688 16	164,126 42	15,720 33	16,467 52
6	.....	.....	.....	.....	.....	.....
7	5.30	18.66	.....	65.55	9.52	2.72

COLLEGIATE INSTITUTES

I. TABLE K—FINANCIAL

High Schools—Concluded	Expenditure— Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	Art, manual training, household science and agriculture department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
105 Tweed	422 92	.....	1,730 54
106 Uxbridge	113 31	.....	1,292 51
107 Vienna	.....	.....	171 85
108 Walkerton	50 60	.....	1,016 44
109 Wallaceburg	52 24	.....	1,688 47
110 Wardsville	85 75	.....	434 86
111 Waterdown	67 44	.....	891 61
112 Waterford	.....	.....	1,091 38
113 Watford	.....	.....	1,600 55
114 Welland	223 55	.....	3,991 70
115 Weston	160 93	.....	3,047 92
116 Whitby	51 40	.....	3,444 06
117 Wiarton	76 82	.....	1,233 89
118 Williamstown	.....	.....	1,073 83
119 Winchester	66 79	285 39	1,584 08
120 Wingham	98 82	87 99	1,723 93
1 Totals, High Schools	16,620 98	4,363 10	229,674 73
2 Totals, Collegiate Institutes	13,728 28	13,012 41	332,411 01
3 Grand Totals, 1919	30,349 26	17,375 51	562,085 74
4 Grand Totals, 1918	24,319 06	6,723 98	613,153 88
5 Increases	6,030 20	10,651 53	.....
6 Decreases	.....	.....	51,068 14
7 Percentages	1.10	.63	20.45

AND HIGH SCHOOLS—Continued

STATEMENT—Concluded

Concluded

	Total Expenditure	Charges per year for Tuition
	$ c.	
105	5,820 80	Free.
106	7,747 49	Res. $5; non-res. $7.50.
107	2,239 48	Free.
108	7,343 89	Res. F. I free, all others $10.
109	7,882 81	Res. free; non-res. $10.
110	2,797 04	$7.50.
111	5,056 30	$10.
112	4,672 38	Free.
113	7,857 70	Res. $10; non-res. free.
114	14,165 11	Free.
115	10,587 49	$10.
116	11,376 48	Res. $6; non-res. $7.50.
117	5,680 60	$6.
118	6,448 83	Free.
119	7,311 24	Free.
120	10,031 89	L. Sch. $6 M. Sch. $8; U. Sch. $10.
1	1,015,961 51	62 free; 58 not free.
2	1,732,080 43	18 free; 29 not free.
3	2,748,041 94	80 free; 87 not free.
4	2,586,114 08	80 free; 84 not free.
5	161,927 86	..... 3 not free.
6	.....	.....
7	.....	47.9 free; 52.09 not free.

Cost per pupil, enrolled attendance, $83.18; average attendance, $102.47.

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED

Collegiate Institutes	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools—Grade I and Grade II	Value o		
					Library	Scientific Apparatus	Charts, Maps and Globes
					$	$	$
1 Barrie	B	5	1	II	219	914	28
2 Brantford	B	3½	1	II	866	2,537	611
3 Brockville	S	3	.....	II	1,013	1,283	192
4 Chatham	B	1½	1	II	1,194	3,314	271
5 Clinton	B	3	.....	II	1,033	1,143	135
6 Cobourg	B	1	.....	II	1,852	1,530	219
7 Collingwood	B	1¼	1	.....	868	1,083	172
8 Fort William	B	1¾	1	.....	1,121	1,048	179
9 Galt	S	8½	.....	.....	1,309	1,702	265
10 Goderich	B	¾	.....	.....	1,079	814	103
11 Guelph	S	4½	1	.....	1,100	2,233	282
12 Hamilton	B & S	1½	1	.....	1,962	2,610	407
13 Ingersoll	B	2	1	II	1,087	938	118
14 Kingston	B	2½	1	II	1,180	1,419	239
15 Kitchener-Waterloo	B	4⅗	.....	.....	1,953	1,598	266
16 Lindsay	B	⅘	1	II	1,818	1,556	92
17 London	B	3	1	.....	1,291	3,163	342
18 Morrisburg	B	12	1	.....	800	1,167	161
19 Napanee	B	3½	1	.....	1,136	925	125
20 Niagara Falls	B	5¾	.....	II	1,191	1,137	114
21 North Bay	B	2	.....	I	718	1,148	201
22 Orillia	B	2	1	.....	862	1,288	163
23 Ottawa	S	1	.....	.....	3,042	5,112	449
24 Owen Sound	B	4½	1	II	1,614	1,568	139
25 Perth	B	3½	1	II	1,118	1,063	141
26 Peterborough	B	1½	1	.....	1,389	1,232	86
27 Picton	B	2¾	.....	I	1,032	1,302	242
28 Port Arthur	S	.....	1	I	1,166	1,883	309
29 Renfrew	B	2½	1	.....	832	726	95
30 St. Catharines	B	⅗	1	.....	1,054	1,564	187
31 St. Mary's	B	1¾	.....	II	1,026	1,341	132
32 St. Thomas	B	1	1	.....	1,085	2,150	85
33 Sarnia	B	2½	1	.....	1,269	1,650	133
34 Seaforth	B	2½	.....	II	876	810	78
35 Smith's Falls	B	4½	1	.....	692	1,406	88
36 Stratford	B	10	.....	II	1,316	1,845	170
37 Strathroy	B	10	.....	II	1,153	1,074	95
38 Toronto, Harbord	B	2½	1	.....	2,794	5,931	239
39 Toronto, Humberside	B & S	6	1	II	2,507	3,987	157
40 Toronto, Jarvis	B	1¾	1	.....	2,312	4,559	228
41 Toronto, Malvern	B	3	1	.....	1,489	2,610	133
42 Toronto, Oakwood	B & S	5	1	.....	2,426	4,675	249
43 Toronto, Parkdale	B	2½	1	.....	2,249	3,442	202
44 Toronto, Riverdale	B	4⅗	1	II	1,804	2,531	127
45 Vankleek Hill	B	2¾	.....	II	828	1,088	114
46 Windsor	B	3	1	II	1,725	1,830	275
47 Woodstock	B	1	1	II	1,659	1,758	238
Totals	.....	.....	32	3 I, 21 II	64,109	91,687	9,076

HIGH SCHOOLS—Continued

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.

General Equipment

	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total value of General Equipment
	$	$	$	$	$	$	$	$	$
1	51	550	66	605	.....	.....	.....	.....	2,433
2	215	1,118	655	449	10,700	.....	.....	415	17,566
3	130	659	103	413	2,500	50	25	319	6,687
4	101	2,100	213	374	2,500	.....	.....	177	10,244
5	103	225	84	97	875	.....	.....	160	3,855
6	132	1,050	162	555	3,000	31	.....	350	8,881
7	102	400	117	257	1,200	31	.....	100	4,330
8	145	995	274	344	16,000	.....	.....	40	20,146
9	261	1,100	362	173	.....	662	25	1,793	7,652
10	77	400	107	279	2,500	.....	.....	190	5,549
11	52	960	228	1,036	2,800	100	75	625	9,491
12	100	.....	219	1,000	8,000	125	.....	774	15,197
13	101	340	100	366	800	25	15	164	4,054
14	100	720	114	415	7,000	.....	.....	300	11,487
15	173	1,433	201	616	1,000	191	.....	412	7,843
16	102	900	268	506	4,000	250	.....	152	9,644
17	142	1,881	377	714	10,500	.....	.....	.....	18,410
18	111	250	100	359	980	.....	.....	233	4,161
19	101	420	115	429	962	.....	.....	214	4,427
20	103	955	110	355	10,000	.....	.....	200	14,165
21	156	800	102	417	10,000	.....	.....	77	13,619
22	93	520	116	288	1,800	.....	.....	150	5,280
23	245	2,231	465	1,571	10,000	.....	.....	823	23,938
24	125	395	121	275	3,000	100	.....	100	7,437
25	106	200	157	340	7,000	.....	9	56	10,190
26	196	1,358	189	81	.....	150	50	934	5,665
27	102	1,040	137	302	5,000	.....	40	779	9,976
28	104	800	202	444	15,000	143	6	233	20,290
29	101	225	101	335	5,000	.....	.....	.....	7,415
30	114	1,225	190	409	8,000	.....	.....	437	13,180
31	106	260	194	553	6,000	40	.....	141	9,793
32	155	1,490	155	480	1,532	150	.....	600	7,882
33	110	1,100	132	311	1,380	.....	.....	250	6,335
34	100	.....	115	157	600	.....	.....	40	2,776
35	107	610	103	64	7,688	.....	.....	84	10,842
36	92	1,050	500	433	2,000	500	.....	450	8,356
37	100	200	94	371	3,500	.....	.....	200	6,787
38	109	.....	1,320	1,110	10,000	.....	200	500	22,203
39	157	90	385	578	10,000	.....	.....	715	18,576
40	167	.....	637	400	7,000	678	75	1,635	17,691
41	173	.....	239	581	5,000	.....	.....	423	10,648
42	75	.....	1,229	723	10,000	.....	.....	796	20,173
43	149	.....	387	320	10,000	.....	.....	410	17,159
44	113	.....	672	575	10,000	.....	50	637	16,509
45	110	260	108	304	3,200	.....	13	100	6,125
46	142	1,803	153	595	40,000	100	.....	200	46,823
47	127	566	118	529	5,000	.....	.....	227	10,222
	5,836	32,679	12,296	21,888	283,017	3,326	583	17,615	542,112

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED

Collegiate Institutes—Continued	Value of Manual Training Department Equipment				Value of Household Science Department Equipment			Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)
	Woodwork	Woodturning	Forging	Machine Shop Practice	Cookery, Sanitation and Hygiene	Handwork and Machine Sewing	Laundry Work		
	$	$	$	$	$	$	$	$	$
1 Barrie	.....	.....	.....	.....	.....	.....	.....	.....	.....
2 Brantford	886	285	502	467	675	100	.....	.....	160
3 Brockville	.....	.....	.....	.....	.....	.....	.....	185	120
4 Chatham	768	.....	.....	.....	1,392	.....	.....	.....	.....
5 Clinton	.....	.....	.....	.....	.....	.....	.....	244	114
6 Cobourg	.....	.....	.....	.....	1,462	280	.....	190	.....
7 Collingwood	1,066	.....	.....	.....	874	.....	.....	.....	45
8 Fort William	1,422	.....	.....	.....	1,376	105	.....	.....	.....
9 Galt	1,056	299	.....	.....	1,457	33	22	.....	125
10 Goderich	.....	.....	.....	.....	.....	.....	.....	.....	.....
11 Guelph	.....	.....	.....	.....	.....	.....	.....	.....	.....
12 Hamilton	520	.....	.....	.....	.....	.....	.....	.....	25
13 Ingersoll	391	179	83	399	504	65	.....	161	.....
14 Kingston	.....	.....	.....	.....	.....	.....	.....	.....	.....
15 Kitchener-Waterloo	771	257	700	829	1,647	.....	.....	.....	125
16 Lindsay	.....	.....	.....	.....	.....	.....	.....	.....	102
17 London	923	.....	.....	.....	943	210	.....	181	142
18 Morrisburg	.....	.....	.....	.....	.....	.....	.....	.....	.....
19 Napanee	.....	.....	.....	.....	.....	.....	.....	.....	.....
20 Niagara Falls	.....	.....	.....	.....	746	296	.....	.....	.....
21 North Bay	.....	.....	.....	.....	.....	.....	.....	.....	.....
22 Orillia	.....	.....	.....	.....	.....	.....	.....	.....	.....
23 Ottawa	.....	.....	.....	.....	.....	.....	.....	.....	73
24 Owen Sound	576	350	.....	.....	682	11	.....	.....	25
25 Perth	.....	.....	.....	.....	.....	.....	.....	.....	.....
26 Peterborough	.....	.....	.....	.....	.....	.....	.....	.....	.....
27 Picton	.....	.....	.....	.....	.....	.....	.....	254	.....
28 Port Arthur	571	240	.....	.....	1,591	483	52	.....	.....
29 Renfrew	.....	.....	.....	.....	.....	.....	.....	.....	.....
30 St. Catharines	.....	.....	.....	.....	.....	.....	.....	.....	95
31 St. Mary's	.....	.....	.....	.....	.....	.....	.....	.....	106
32 St. Thomas	624	.....	.....	.....	872	.....	.....	91	.....
33 Sarnia	.....	.....	.....	.....	.....	.....	.....	.....	.....
34 Seaforth	.....	.....	.....	.....	.....	.....	.....	.....	.....
35 Smith's Falls	1,360	364	.....	.....	582	35	.....	333	.....
36 Stratford	600	400	143	390	1,000	50	.....	.....	.....
37 Strathroy	.....	.....	.....	.....	.....	.....	.....	109	100
38 Toronto, Harbord	.....	.....	.....	.....	.....	.....	.....	.....	.....
39 Toronto, Humberside	.....	.....	.....	.....	.....	.....	.....	.....	.....
40 Toronto, Jarvis	.....	.....	.....	.....	.....	.....	.....	.....	.....
41 Toronto, Malvern	.....	.....	.....	.....	.....	.....	.....	.....	.....
42 Toronto, Oakwood	2,278	351	.....	.....	390	6	70	.....	75
43 Toronto, Parkdale	.....	.....	.....	.....	.....	.....	.....	.....	.....
44 Toronto, Riverdale	800	1,589	.....	.....	234	.....	1,600	.....	24
45 Vankleek Hill	.....	.....	.....	.....	.....	.....	.....	224	.....
46 Windsor	686	.....	.....	.....	1,386	.....	.....	.....	.....
47 Woodstock	778	421	843	2,104	932	67	.....	.....	.....
Totals	16,076	4,735	2,271	4,189	18,745	1,741	1,744	1,972	1456

HIGH SCHOOLS—Continued

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.—Continued

	Total value of Special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture	Religious and other Exercises					Destination of Pupils							
			Schools using authorized Scripture Readings	Schools using the Bible	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
	$	$													
1		119,000	.....	....	1	....	1	20	12	10	6	12	15	5	10
2	3,075	250,000	1	1	1	....	1	32	16	15	16	10	9	18	19
3	305	50,137	.....	....	1	....	1	27	18	6	11	13	6	4	....
4	2,160	60,000	1	1	1	....	....	53	17	4	13	6	10	17	1
5	358	30,000	1	....	1	....	1	4	14	2	17	4	14	4	1
6	1,932	27,100	1	1	1	....	....	12	8	1	5	....	12	2	7
7	1,985	32,704	.....	1	1	....	1	40	7	3	13	4	8	3	4
8	2,903	203,000	.....	1	1	....	1	26	4	1	10	22	29	7	....
9	2,992	90,000	.....	1	1	....	1	32	7	7	12	10	19	21	10
10		41,000	1	....	1	....	1	8	5	1	9	5	5	13	10
11		50,000	.....	....	1	....	1	60	6	.....	8	....	20	12	6
12	545	164,863	1	1	1	....	1	75	4	24	14	13	30	37	83
13	1,782	25,000	1	1	1	....	1	4	13	2	2	2	6	7	3
14		123,970	1	1	1	....	....	64	14	12	12	13	23	25	15
15	4,329	50,000	1	1	1	....	1	56	9	12	12	....	1	.....	22
16	102	110,000	.....	....	1	....	1	22	14	6	16	5	8	8	9
17	2,399	100,000	1	....	1	....	1	213	15	26	32	19	50	45	44
18		15,350	1	1	1	....	1	3	8	2	5	6	4	3	2
19		60,000	1	1	1	....	1	27	23	1	9	5	5	13	2
20	1,042	100,000	.....	1	1	....	1	9	6	9	2	18	4	1	9
21		105,000	.....	....	1	....	....	.....	1	2	10	18	15	11	12
22		82,500	.....	1	1	....	....	41	4	4	16	9	4	18	11
23	73	633,416	1	....	1	....	1	53	17	30	25	13	149	25	85
24	1,644	100,000	.....	....	1	....	1	30	23	1	21	8	16	6	4
25		46,811	1	1	1	....	1	13	4	.....	6	2	4	6	8
26		83,992	.....	....	1	....	1	29	9	9	8	26	20	17	15
27	254	65,000	.....	....	1	....	1	8	14	6	10	2	5	1	5
28	2,937	175,000	1	....	1	....	1	21	....	.....	4	4	10	5	6
29		35,000	.....	....	1	....	1	10	14	18	20	9	.....	3	6
30	95	70,000	.....	1	1	....	1	51	11	7	9	....	9	15	30
31	106	33,000	1	1	1	....	1	17	10	3	4	5	5	8	17
32	1,587	75,000	.....	....	1	....	1	61	13	10	17	30	11	7	....
33		42,000	.....	1	1	....	1	42	2	9	7	1	24	10	34
34		12,000	1	....	1	....	....	3	1	7	14	3	2	2	....
35	2,674	125,000	.....	....	1	....	....	16	6	5	9	3	10	5	14
36	2,583	100,000	.....	....	1	....	1	63	21	5	21	7	11	4	5
37	209	60,000	1	....	1	....	1	8	3	3	16	2	9	15	....
38		227,837	.....	1	1	....	1	50	2	25	25	....	23	25	50
39		176,000	1	....	1	....	1	37	7	26	25	3	36	35	40
40		135,500	1	....	1	....	1	29	3	30	15	10	33	28	24
41		120,000	1	1	1	....	1	43	11	10	3	17	9	23	30
42	3,170	273,619	1	1	1	....	1	60	....	8	11	2	37	33	36
43		100,000	.....	1	1	....	1	42	6	25	14	13	30	40	10
44	4,247	257,600	.....	1	1	....	1	47	1	20	14	13	17	24	24
45	224	20,000	.....	1	1	....	1	4	27	.....	3	3	6	6	3
46	2,072	255,500	.....	....	1	....	1	105	1	17	6	10	59	18	29
47	5,145	100,000	.....	....	1	....	1	33	26	6	11	1	28	6	22
	52,929	5,211,899	22	24	47	....	40	1,703	457	430	568	381	860	641	777

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED SCHOOLS,

High Schools	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools—Grade I and Grade II	Value of General Library	Scientific Apparatus	Charts, Maps and Globes	Art Models
					$	$	$	$
1 Alexandria	B	3	....	II	657	680	64	83
2 Alliston	B	4	....	.....	387	826	55	49
3 Almonte	S	2	1	.....	408	365	55	70
4 Amherstburg	B	2	....	.....	315	431	82	52
5 Arnprior	B	1	1	II	674	686	97	75
6 Arthur	B	3¼	....	II	500	811	58	79
7 Athens	S	2¼	....	II	713	818	83	84
8 Aurora	B	5	....	II	536	845	109	76
9 Avonmore	B	2	....	II	368	476	70	57
10 Aylmer	B	4	....	II	1,115	957	268	85
11 Beamsville	B	3	1	I	264	614	84	54
12 Belleville	B & S	3	1	.....	1,025	1,654	80	95
13 Bowmanville	B	3	....	II	792	861	58	103
14 Bracebridge	B & S	1	....	.....	518	698	89	50
15 Bradford	B	6	....	II	381	462	76	83
16 Brampton	B	5	....	I	120	957	51	61
17 Brighton	B	4	1	II	361	375	152	76
18 Burlington	B	2	....	.....	335	347	125	61
19 Caledonia	B	1½	1	.....	683	877	110	62
20 Campbellford	B	[illegible]	1	.....	824	979	106	108
21 Carleton Place	S	1½	1	.....	908	744	67	91
22 Cayuga	B	1	1	.....	467	345	51	84
23 Chatsworth	B	1	....	.....	312	325	55	51
24 Chesley	B	7	....	.....	451	486	116	66
25 Chesterville	B	3	....	.....	324	525	72	50
26 Colborne	B	[illegible]	1	II	567	625	60	55
27 Cornwall	B	2	....	II	855	712	116	80
28 Deseronto	B	3	....	I	614	716	103	51
29 Dundalk	B	2	....	.....	296	244	70	57
30 Dundas	B	[illegible]	1	.....	839	987	85	76
31 Dunnville	B	5	1	I	596	1,009	71	91
32 Durham	B	2	....	II	440	527	82	72
33 Dutton	B	1	....	.....	410	665	56	85
34 Elora	S	[illegible]	1	.....	317	467	53	53
35 Essex	B	2	....	.....	453	758	66	75
36 Exeter	B	3	1	.....	282	463	60	61
37 Fergus	S	[illegible]	1	.....	677	571	83	75
38 Flesherton	B	1½	....	.....	356	397	56	53
39 Forest	B	2	....	II	541	554	50	52
40 Fort Frances	F	1	....	II	314	349	88	83
41 Gananoque	B	[illegible]	1	II	784	717	58	119
42 Georgetown	B	4½	....	.....	542	531	106	91
43 Glencoe	B	1	....	.....	486	567	65	51
44 Gravenhurst	B	5	1	II	393	446	79	53
45 Grimsby	B	4	1	II	336	373	101	65
46 Hagersville	B	3¼	....	.....	577	657	110	79
47 Haileybury	B	5	....	II	687	939	79	92
48 Harriston	B	3	1	II	441	491	62	79
49 Hawkesbury	B	1½	1	II	579	572	62	70
50 Iroquois	B	3	....	.....	970	1,115	89	77
51 Kemptville	B	2	1	.....	550	887	81	70
52 Kenora	B	1	1	II	428	743	73	50

HIGH SCHOOLS—Continued

EQUIPMENT, DESTINATION OF PUPILS, Etc.—Continued

	Equipment								Value of Manual Training Department Equipment			
	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total value of General Equipment	Woodwork	Woodturning	Forging	Machine Shop Practice
	$	$	$	$	$	$	$	$	$	$	$	$
1	....	105	26	.....	.....	....	140	1,755	.....	.....	.....	.....
2	....	54	.....	.....	.....	....	35	1,406	.....	.....	.....	.....
3	....	93	22	.....	.....	....	27	1,040	.....	.....	.....	.....
4	....	30	31	.....	.....	....	10	951	367	.....	.....	.....
5	....	104	56	.....	.....	....	182	1,874	.....	.....	.....	.....
6	....	83	13	.....	.....	....	39	1,583	.....	.....	.....	.....
7	....	123	35	.....	.....	....	112	1,968	.....	.....	.....	.....
8	....	102	90	.....	.....	....	200	1,958	.....	.....	.....	.....
9	....	64	18	72	.....	2	5	1,132	.....	.....	.....	.....
10	....	220	173	680	.....	....	90	3,588	.....	.....	.....	.....
11	....	12	20	.....	.....	.....	.....	1,048	.....	.....	.....	.....
12	815	129	50	.....	.....	12	251	4,111	.....	.....	.....	.....
13	50	139	74	.....	.....	....	319	2,396	.....	.....	.....	.....
14	....	40	.....	.....	.....	....	50	1,445	.....	.....	.....	.....
15	20	52	44	.....	.....	.....	.....	1,118	.....	.....	.....	.....
16	....	118	75	10,000	.....	....	200	11,582	.....	.....	.....	.....
17	....	75	15	.....	.....	....	.....	1,054	.....	.....	.....	.....
18	....	30	40	.....	.....	....	.....	938	.....	.....	.....	.....
19	....	107	40	.....	.....	....	.....	1,879	.....	.....	.....	.....
20	175	133	24	.....	.....	....	183	2,532	.....	.....	.....	.....
21	....	99	25	.....	.....	....	.....	1,934	.....	.....	.....	.....
22	....	118	40	.....	.....	....	110	1,215	.....	.....	.....	.....
23	....	47	16	.....	.....	....	15	821	.....	.....	.....	.....
24	....	97	35	.....	.....	....	200	1,451	.....	.....	.....	.....
25	....	46	18	.....	.....	....	74	1,109	.....	.....	.....	.....
26	....	54	45	.....	.....	....	60	1,466	.....	.....	.....	.....
27	1,070	101	60	.....	.....	25	182	3,201	.....	.....	.....	.....
28	....	58	211	.....	.....	....	84	1,837	.....	.....	.....	.....
29	....	50	10	.....	.....	....	25	752	.....	.....	.....	.....
30	795	61	48	.....	.....	....	.....	2,891	.....	.....	.....	.....
31	160	122	80	.....	750	....	200	3,079	.....	.....	.....	.....
32	....	110	28	.....	.....	....	104	1,363	.....	.....	.....	.....
33	....	103	15	.....	.....	....	59	1,393	.....	.....	.....	.....
34	....	1,005	10	.....	.....	....	.....	1,905	.....	.....	.....	.....
35	....	101	53	.....	.....	....	30	1,536	.....	.....	.....	.....
36	150	16	16	.....	.....	....	46	1,094	.....	.....	.....	.....
37	....	101	49	.....	.....	....	50	1,606	.....	.....	.....	.....
38	....	52	35	.....	.....	....	75	1,024	.....	.....	.....	.....
39	....	58	38	.....	.....	....	55	1,348	.....	.....	.....	.....
40	503	56	94	.....	.....	14	43	1,544	.....	.....	.....	.....
41	366	130	172	1,600	.....	....	437	4,383	.....	.....	.....	.....
42	235	151	39	.....	150	....	79	1,924	.....	.....	.....	.....
43	....	68	38	.....	.....	....	.....	1,275	.....	.....	.....	.....
44	120	50	9	.....	.....	....	.....	1,150	.....	.....	.....	.....
45	....	48	55	.....	.....	5	68	1,051	.....	.....	.....	.....
46	....	87	174	.....	.....	....	34	1,718	.....	.....	.....	.....
47	151	76	38	.....	.....	....	345	2,407	.....	.....	.....	.....
48	....	99	11	.....	.....	9	50	1,242	.....	.....	.....	.....
49	....	52	42	.....	.....	....	41	1,418	.....	.....	.....	.....
50	100	108	40	.....	.....	....	.....	2,499	.....	.....	.....	.....
51	....	112	36	.....	.....	....	118	1,854	.....	.....	.....	.....
52	1,328	63	53	2,500	.....	....	165	5,403	.....	.....	.....	.....

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED SCHOOLS,

High Schools	Value of Household Science Department Equipment			Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)	Total value of Special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture
	Cookery, Sanitation and Hygiene	Handwork and Machine Sewing	Laundry Work				
	$	$	$	$	$	$	$
1 Alexandria							30,000
2 Alliston					50	50	2,500
3 Almonte							3,325
4 Amherstburg						367	650
5 Arnprior							20,000
6 Arthur				237		237	15.000
7 Athens				117		117	14,750
8 Aurora							15.000
9 Avonmore							12,908
10 Aylmer							18,000
11 Beamsville	300			395		695	50,000
12 Belleville	852	66	57	94	40	1.109	120,000
13 Bowmanville				480		480	40,000
14 Bracebridge							5,710
15 Bradford							15,000
16 Brampton							80,000
17 Brighton							35,000
18 Burlington							12,000
19 Caledonia							9,000
20 Campbellford							20,000
21 Carleton Place							15,000
22 Cayuga							8,000
23 Chatsworth							1.500
24 Chesley							25,000
25 Chesterville				8		8	9.431
26 Colborne							8,500
27 Cornwall	607	164				771	45,000
28 Deseronto							35,000
29 Dundalk							6,500
30 Dundas							26,511
31 Dunnville							42,000
32 Durham							16,000
33 Dutton							8,000
34 Elora							10,000
35 Essex							15,000
36 Exeter				88		88	13,000
37 Fergus							8,000
38 Flesherton							30,000
39 Forest							25,000
40 Fort Frances							(Rented)
41 Gananoque							29,000
42 Georgetown				71		71	50,000
43 Glencoe							20,000
44 Gravenhurst							14,000
45 Grimsby							30,000
46 Hagersville				7		7	14,000
47 Haileybury							55,000
48 Harriston							15,000
49 Hawkesbury							15,000
50 Iroquois							10,000
51 Kemptville					33	33	30,000
52 Kenora							45,022

HIGH SCHOOLS—Continued

EQUIPMENT, DESTINATION OF PUPILS, ETC.—Continued

	Religious and other Exercises					Destination of Pupils								
	Schools using authorized Scripture Readings	Schools using the Bible	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
1	.....	.....	1	.....	1	4	7	2	5	.....	5	.....	2
2	1	.....	1	.....	.....	.....	7	.....	3	3	8	2	2
3	1	1	1	.....	1	5	7	6	2	8	4	1	1
4	1	.....	1	.....	1	5	5	1	2	2	2	11	1
5	.....	.....	1	.....	1	3	12	4	10	6	2	2	.....
6	.....	.....	1	.....	1	.....	14	.....	8	1	6	5	.....
7	1	1	1	.....	1	6	16	.....	7	1	1	4	6
8	.....	1	1	.....	.....	10	11	2	2	3	2	10	8
9	.....	1	1	.....	1	.....	4	.....	4	4	3	3	....
10	.....	1	1	.....	.....	11	17	.....	3	5	.....	3	4
11	1	1	1	.....	1	2	.....	1	1	2	2	3	.....
12	1	1	1	.....	1	36	6	7	4	2	32	12	12
13	1	1	1	.....	1	4	11	2	6	4	10	6	8
14	.....	.....	1	.....	.....	1	1	.....	7	.....	.....	1	.....
15	.....	1	1	.....	.....	5	7	1	4	4	2	7	6
16	.....	.....	1	.....	1	5	6	3	4	2	3	5	15
17	.....	.....	1	.....	1	1	1	1	2	1	.....	4	3
18	.....	.....	1	.....	.....	1	2	.....	.....	.....	.....	6	4
19	1	1	1	.....	.....	2	4	2	5	4	4	6	.....
20	.....	.....	1	.....	1	11	9	7	10	2	2	11	5
21	.....	.....	1	.....	1	.....	16	2	2	8	6	4	5
22	.....	.....	1	.....	.....	3	3	2	1	.....	8	4	5
23	.....	1	1	.....	.....	3	1	1	2	.....	9	2	1
24	.....	1	1	.....	.....	10	3	.....	5	.....	8	3	4
25	.....	.....	1	.....	1	2	1	1	3	3	6	5	5
26	1	.....	1	.....	.....	.....	11	1	1	.....	8	6	3
27	1	.....	1	.....	1	30	14	4	14	5	8	9	10
28	.....	.....	1	.....	1	5	4	.....	2	4	6	5	3
29	.....	1	1	.....	1	2	10	2	9	.....	3	1	.....
30	.....	.....	1	.....	1	18	8	2	3	5	10	1	7
31	1	.....	1	.....	.....	7	10	6	7	7	.....	2	4
32	1	1	1	.....	1	3	1	.....	10	.....	6	1	5
33	.....	1	1	.....	.....	.....	17	.....	1	1	4	3	3
34	1	1	1	.....	1	1	.....	.....	.....	.....	4	.....	.....
35	1	.....	1	.....	1	26	13	2	1	.....	1	5	1
36	1	1	1	.....	1	5	9	.....	2	3	1	8	2
37	.....	.....	1	.....	1	14	4	2	7	13	9	.....	.....
38	.....	1	1	.....	1	10	8	1	6	.....	1	5	1
39	.....	.....	1	.....	.....	5	9	.....	4	3	.....	5	5
40	.....	.....	1	.....	.....	6	5	1	6	.....	3	.....	.....
41	1	.....	1	.....	1	8	3	3	1	3	19	3	1
42	.....	.....	1	.....	1	13	8	1	8	3	4	11	9
43	.....	.....	1	.....	.....	2	7	.....	2	.....	4	2	10
44	.....	1	1	.....	1	1	1	.....	3	.....	8	2	3
45	1	1	1	1	.....	9	10	.....	2	2	3	5	2
46	.....	1	1	.....	.....	6	4	.....	5	.....	.....	5	1
47	.....	.....	1	.....	1	13	1	3	3	11	5	14	5
48	.....	.....	1	.....	.....	7	5	3	7	.....	4	1	.....
49	1	.....	1	.....	.....	4	4	.....	3	7	.....	14	.....
50	.....	.....	1	.....	1	2	4	2	5	2	1	.....	2
51	1	1	1	.....	1	15	9	4	6	.....	7	11	6
52	1	1	1	.....	1	4	2	1	5	2	12	6	8

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED

High Schools	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools—Grade I and Grade II	Value of General Library	Scientific Apparatus	Charts, Maps and Globes	Art Models
					$	$	$	$
53 Kincardine	B	6½	1	.....	735	961	46	99
54 Leamington	B	2	.....	II	578	726	120	105
55 Listowel	B	2	1	I	460	466	60	84
56 Lucan	B	3½	.....	.....	457	606	88	76
57 Madoc	B	1¼	.....	.....	561	1,112	68	97
58 Markdale	B	2	.....	.....	324	311	53	53
59 Markham	B	1¼	.....	.....	477	674	99	77
60 Meaford	B	4½	.....	I	752	1,300	110	77
61 Midland	B	6½	.....	II	664	961	95	85
62 Milton	S	1	.....	.....	336	441	49	45
63 Mitchell	B	¾	.....	II	485	596	180	89
64 Morewood	B	3	.....	.....	363	413	72	50
65 Mount Forest	B	2½	1	II	537	674	47	131
66 Newburgh	S	1½	1	.....	605	440	75	57
67 Newcastle	B	3	1	.....	410	381	42	49
68 Newmarket	B	2	.....	II	532	658	186	90
69 Niagara	B	⅛	.....	.....	301	298	72	53
70 Niagara Falls South	B	2	.....	I	669	1,252	106	76
71 Norwood	B	8	1	II	410	569	97	56
72 Oakville	B	3½	1	II	612	812	261	77
73 Omemee	B	2	1	.....	342	364	58	67
74 Orangeville	B	4	.....	II	874	1,117	161	75
75 Oshawa	B	4½	1	I	897	1,405	227	83
76 Paris	B	4	1	II	674	801	123	75
77 Parkhill	B	3	1	.....	620	825	51	78
78 Parry Sound	B	¾	.....	.....	485	636	91	65
79 Pembroke	B	¾	1	.....	858	978	112	79
80 Penetanguishene	B	10	.....	I	434	795	72	63
81 Petrolia	B	2	.....	.....	571	962	66	84
82 Plantagenet	B	1	.....	.....	402	436	68	66
83 Port Dover	B	2½	1	.....	552	500	103	52
84 Port Elgin	B	1	.....	.....	331	627	108	69
85 Port Hope	B	1½	.....	II	774	989	56	76
86 Port Perry	B	1½	1	.....	488	781	60	70
87 Port Rowan	B	3½	1	II	409	529	54	80
88 Prescott	B	1⅛	1	II	463	921	111	80
89 Richmond Hill	B	1½	1	.....	463	535	203	77
90 Ridgetown	B	1¼	.....	.....	830	1,440	120	107
91 Rockland	B	3	.....	II	393	401	77	53
92 Sault Ste. Marie	B	6	.....	.....	755	937	109	78
93 Shelburne	B	2½	1	.....	369	668	110	71
94 Simcoe	B	6	1	II	648	978	126	97
95 Smithville	B	2	.....	.....	254	529	53	50
96 Stirling	B	2	1	II	442	465	67	75
97 Streetsville	B	⅛	.....	.....	333	472	89	49
98 Sudbury	B	4	.....	.....	647	1,649	69	89
99 Sydenham	S	2½	.....	II	506	635	95	76
100 Thorold	B	2¼	.....	.....	304	697	125	48
101 Tillsonburg	B & S	2½	.....	II	477	946	203	79
102 Toronto, Commerce	B	4	1	.....	2,649	3,967	288	121
103 Toronto, North	B	4	1	II	737	1,129	68	100
104 Trenton	B	3¾	1	I	657	611	168	79

HIGH SCHOOLS—Continued

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.—Continued

	Equipment								Value of Manual Training Department Equipment			
	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total value of General Equipment	Woodwork	Woodturning	Forging	Machine Shop Practice
	$	$	$	$	$	$	$	$	$	$	$	$
53	....	95	80	.....	800	....	.....	2,816	.....	.....	.....	.....
54	....	109	71	.....	.....	....	85	1,794	.....	.....	.....	.....
55	500	106	42	.....	.....	....	.....	1,718	.....	.....	.....	.....
56	....	102	72	.....	.....	5	25	1,431	.....	.....	.....	.....
57	....	105	56	.....	.....	....	80	2,079	.....	.....	.....	.....
58	....	50	110	.....	.....	....	10	911	.....	.....	.....	.....
59	....	102	16	.....	.....	....	75	1,520	.....	.....	.....	.....
60	590	133	391	1,404	.....	....	435	5,192	.....	.....	.....	.....
61	....	112	80	.....	50	4	300	2,351	.....	.....	.....	.....
62	....	50	.....	.....	.....	....	.....	921	.....	.....	.....	.....
63	....	102	205	550	.....	....	92	2,299	.....	.....	.....	.....
64	....	53	18	.....	1	....	37	1,007	.....	.....	.....	.....
65	....	102	10	.....	.....	....	125	1,626	.....	.....	.....	.....
66	....	10	16	.....	.....	....	50	1,253	.....	.....	.....	.....
67	....	42	.....	.....	.....	....	20	944	.....	.....	.....	.....
68	260	122	184	350	.....	10	80	2,472	.....	.....	.....	.....
69	90	38	237	1,475	.....	....	.....	2,564	.....	.....	.....	.....
70	685	117	466	7,500	.....	....	25	10,896	.....	.....	.....	.....
71	....	63	32	.....	.....	....	.....	1,227	.....	.....	.....	.....
72	390	97	59	.....	.....	....	75	2,383	.....	.....	.....	.....
73	....	50	30	.....	.....	....	20	931	.....	.....	.....	.....
74	500	99	313	2,500	.....	....	17	5,656	.....	.....	.....	.....
75	1,162	194	183	.....	.....	....	207	4,358	.....	.....	.....	.....
76	252	111	30	.....	.....	....	117	2,183	.....	.....	.....	.....
77	....	54	6	.....	.....	....	200	1,834	.....	.....	.....	.....
78	....	55	101	.....	.....	....	94	1,527	.....	.....	.....	.....
79	510	116	40	.....	.....	....	188	2,881	.....	.....	.....	.....
80	180	157	31	.....	60	15	112	1,919	.....	.....	.....	.....
81	....	77	22	.....	.....	....	56	1,838	.....	.....	.....	.....
82	....	68	20	.....	.....	....	15	1,075	.....	.....	.....	.....
83	....	59	25	.....	.....	....	32	1,323	.....	.....	.....	.....
84	100	42	20	.....	.....	....	.....	1,297	.....	.....	.....	.....
85	515	88	41	.....	.....	....	200	2,739	.....	.....	.....	.....
86	....	78	90	.....	.....	....	44	1,611	.....	.....	.....	.....
87	....	51	42	.....	.....	....	.....	1,165	.....	.....	.....	.....
88	....	101	44	.....	.....	....	74	1,794	.....	.....	.....	.....
89	....	84	19	.....	.....	....	.....	1,381	.....	.....	.....	.....
90	300	101	256	900	50	5	15	4,124	.....	.....	.....	.....
91	....	48	10	.....	.....	....	.....	982	.....	.....	.....	.....
92	885	101	12	.....	.....	....	242	3,119	539	270	238	2,991
93	....	60	36	.....	.....	....	25	1,339	.....	.....	.....	.....
94	....	141	47	.....	.....	....	25	2,062	.....	.....	.....	.....
95	....	65	17	.....	.....	....	.....	968	.....	.....	.....	.....
96	....	100	17	.....	.....	8	.....	1,174	.....	.....	.....	.....
97	150	51	12	.....	.....	....	103	1,259	.....	.....	.....	.....
98	890	119	431	2,500	.....	....	40	6,434	.....	.....	.....	.....
99	....	151	47	.....	25	....	44	1,579	.....	.....	.....	.....
100	180	50	5	.....	.....	....	5	1,414	.....	.....	.....	.....
101	....	104	63	.....	.....	....	372	2,244	.....	.....	.....	.....
102	....	.....	336	.....	435	....	200	7,996	.....	.....	.....	.....
103	....	180	61	.....	.....	....	80	2,355	.....	.....	.....	.....
104	....	67	46	2,500	.....	....	192	4,320	.....	.....	.....	.....

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED

High Schools—Continued	Value of Household Science Department Equipment			Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)	Total value of Special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture
	Cookery, Sanitation and Hygiene	Handwork and Machine Sewing	Laundry Work				
	$	$	$	$	$	$	$
53 Kincardine							19,050
54 Leamington				132		132	25,000
55 Listowel							37,000
56 Lucan							21,000
57 Madoc							12,000
58 Markdale							6,750
59 Markham							20,000
60 Meaford							30,000
61 Midland							24,000
62 Milton							
63 Mitchell							10,000
64 Morewood							11,967
65 Mount Forest							14,400
66 Newburgh					16	16	4,000
67 Newcastle							7,000
68 Newmarket							32,000
69 Niagara							6,000
70 Niagara Falls South	860	150		522		1,532	45,000
71 Norwood							1,000
72 Oakville				514		514	50,000
73 Omemee	69					69	5,000
74 Orangeville							20,200
75 Oshawa							30,000
76 Paris							25,000
77 Parkhill							10,000
78 Parry Sound							37,000
79 Pembroke							20,000
80 Penetanguishene							25,000
81 Petrolia							4,000
82 Plantagenet							6,000
83 Port Dover							10,293
84 Port Elgin							8,000
85 Port Hope							68,000
86 Port Perry	308			417		725	15,000
87 Port Rowan							2,500
88 Prescott							20,032
89 Richmond Hill							15,000
90 Ridgetown							16,900
91 Rockland							15,000
92 Sault Ste. Marie	995	104				5,137	65,000
93 Shelburne							10,000
94 Simcoe							25,000
95 Smithville							7,500
96 Stirling							20,000
97 Streetsville							12,400
98 Sudbury							47,965
99 Sydenham							35,000
100 Thorold							13,000
101 Tillsonburg					9	9	25,000
102 Toronto, Commerce							425,000
103 Toronto, North							200,000
104 Trenton							75,000

HIGH SCHOOLS—Continued

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.—Continued

	Religious and other Exercises					Destination of Pupils								
	Schools using authorized Scripture Readings	Schools using the Bible	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
53	1	1	1	.....	1	2	7	3	9	3	5	4	3
54	.....	.....	1	.....	1	20	13	2	12	4	9	8	.....
55	.....	.....	1	.....	.....	16	4	1	10	2	6	19	6
56	.....	.....	1	.....	.....	.....	3	.....	3	.....	8	7	4
57	.....	1	1	.....	1	1	9	3	7	1	10	1	3
58	1	1	1	.....	1	5	3	.....	6	.....	3	1	.....
59	.....	.....	1	.....	1	7	16	2	2	.....	1	1	9
60	.....	.....	1	.....	.....	17	18	1	8	1	13	3	2
61	.....	.....	1	.....	.....	2	6	1	2	3	24	7	4
62	.....	.....	1	.....	.....	6	3	.....	.....	.....	2	5	8
63	1	.....	1	.....	1	3	6	3	2	7	8	11	4
64	1	1	1	.....	1	.....	9	.....	5	.....	.....	6	.....
65	1	.....	1	.....	1	7	5	2	9	3	5	5	.....
66	1	1	1	.....	1	3	7	.....	5	.....	9	5	.....
67	.....	1	1	.....	.....	.....	5	.....	3	.....	.....	.....	.....
68	.....	1	1	.....	1	22	27	1	6	5	2	2	2
69	1	1	1	.....	.....	2	1	.....	1	.....	3	2	2
70	.....	.....	1	.....	1	8	4	3	2	1	3	5	.....
71	1	.....	1	.....	1	4	7	1	5	.....	5	4	2
72	.....	.....	1	.....	1	18	16	.....	3	3	7	7	1
73	.....	.....	1	.....	1	1	4	.....	2	1	2	....	.....
74	.....	.....	1	.....	1	4	4	2	5	.....	7	8	7
75	.....	.....	1	.....	1	31	5	1	11	1	6	11	5
76	1	.....	1	1	1	5	8	.....	2	3	13	1	.....
77	1	1	1	.....	.....	7	4	.....	9	.....	11	8	.....
78	.....	1	1	.....	1	9	1	1	3	.....	5	7	8
79	.....	.....	1	.....	1	5	12	7	4	5	15	9	12
80	.....	.....	1	.....	.....	7	.....	.....	1	1	7	6	4
81	.....	.....	1	.....	1	14	3	.....	11	.....	19	8	1
82	.....	.....	1	.....	.....	.....	5	.....	5	.....	.....	2	.....
83	.....	1	1	.....	.....	1	1	.....	1	1	2	1	.....
84	1	1	1	.....	.....	6	10	1	5	.....	.....	2	1
85	.....	.....	1	.....	1	3	.....	2	2	2	4	2	3
86	.....	.....	1	.....	1	6	4	3	4	1	3	4	6
87	.....	1	1	.....	.....	.....	2	.....	1	1	2	2	1
88	.....	.....	1	.....	1	6	5	.....	6	1	.....	3	7
89	1	.....	1	.....	1	4	14	3	1	3	17	8	.....
90	1	1	1	.....	.....	2	3	4	10	2	5	1	.....
91	.....	.....	1	.....	.....	2	.....	.....	5	.....	3	1	5
92	.....	.....	1	.....	1	21	.....	7	8	25	3	8	7
93	.....	1	1	.....	.....	5	6	.....	1	2	2	2	4
94	1	1	1	.....	1	12	10	1	10	10	2	8	.....
95	.....	1	1	.....	.....	5	5	.....	3	.....	2	8	1
96	.....	1	1	.....	.....	5	16	.....	9	.....	1	12	4
97	1	.....	1	.....	1	8	3	.....	3	2	1	3	2
98	.....	.....	1	.....	1	21	.....	3	2	7	1	9	19
99	.....	1	1	.....	1	5	9	1	8	.....	8	3	7
100	.....	1	1	.....	1	6	.....	.....	1	1	10	10	.....
101	.....	.....	1	.....	.....	12	4	2	4	.....	4	6	7
102	.....	.....	1	.....	1	289	.....	.....	.....	7	28	11	14
103	.....	1	1	.....	.....	33	5	1	6	.....	.....	16	.....
104	1	.....	1	.....	1	3	10	.....	3	6	1	6	1

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED

High Schools	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools — Grade I and Grade II	Value of General Library	Scientific Apparatus	Charts, Maps and Globes	Art Models
					$	$	$	$
105 Tweed	B	3½	....	II	279	833	53	47
106 Uxbridge	B	½	1	.....	560	674	127	83
107 Vienna	B	3½	1	.....	646	352	85	57
108 Walkerton	B	1¼	....	II	481	602	84	100
109 Wallaceburg	B	1½	....	II	548	468	63	100
110 Wardsville	B	3	1	.....	340	400	63	51
111 Waterdown	S	3	....	.....	205	423	44	50
112 Waterford	B	3	....	.....	522	663	79	70
113 Watford	B	3½	1	.....	600	907	165	109
114 Welland	B	3	....	.....	544	1,009	85	108
115 Weston	B	4	1	II	525	1,075	252	82
116 Whitby	B	1	1	II	703	1,745	136	92
117 Wiarton	S	2	....	.....	592	597	89	59
118 Williamstown	B	3	....	.....	466	544	83	77
119 Winchester	B	3	....	II	529	557	65	50
120 Wingham	B	2	....	II	502	768	176	78
Totals								
1 Totals, High Schools	.....	....	51	101;47 II	65,715	88,219	11,363	8,870
2 Totals, Collegiate Institutes	.....	....	32	31;21 II	64,109	91,687	9,076	5.836
3 Grand Totals, 1919	.....	....	83	131;68 II	129,824	179,906	20,439	14,706
4 Grand Totals, 1918	.....	....	81	161;70 II	125,791	171,393	19,940	14,124
5 Increases	.....	....	2	.....	4,033	8,513	499	582
6 Decreases	.....	....	....	31; 2 II	.....	.....	.....	.....
7 Percentages	.....	....	49.70	*	16.11	22.32	2.53	1.82

* 7.78 per cent., Grade I; 40.71, Grade II; 51.49 not approved.

HIGH SCHOOLS—Continued

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.—Continued

	Equipment								Value of Manual Training Department Equipment			
	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total value of General Equipment	Woodwork	Woodturning	Forging	Machine Shop Practice
	$	$	$	$	$	$	$	$	$	$	$	$
105	.....	68	.....	.....	.....	5	56	1,341	.....	.....	.....	.....
106	.....	120	30	.....	.....	.....	23	1,617	.....	.....	.....	.....
107	.....	59	8	.....	.....	.....	.....	1,207	.....	.....	.....	.....
108	.....	103	24	.....	.....	.....	120	1,514	.....	.....	.....	.....
109	200	108	36	.....	.....	.....	25	1,548	.....	.....	.....	.....
110	.....	51	11	.....	.....	.....	18	934	.....	.....	.....	.....
111	.....	42	21	.....	.....	.....	7	792	.....	.....	.....	.....
112	.....	53	46	.....	.....	.....	43	1,476	.....	.....	.....	.....
113	.....	97	95	.....	.....	.....	112	2,085	.....	.....	.....	.....
114	200	111	205	8,000	.....	.....	49	10,311	.....	.....	.....	.....
115	90	106	103	.....	.....	3	80	2,316	.....	.....	.....	.....
116	435	114	74	.....	.....	.....	260	3,559	.....	.....	.....	.....
117	50	65	25	.....	.....	.....	157	1,634	.....	.....	.....	.....
118	.....	102	117	200	.....	.....	122	1,711	.....	.....	.....	.....
119	.....	40	43	.....	.....	.....	28	1,312	.....	.....	.....	.....
120	.....	126	177	.....	44	.....	48	1,919	.....	.....	.....	.....
1	15,152	11,209	8,092	43,531	1,565	122	9,973	263,811	906	270	238	2,991
2	32,679	12,296	21,888	283,017	3,326	583	17,615	542,112	16,076	4,735	2,271	4,189
3	47,831	23,505	29,980	326,548	4,891	705	27,588	805,923	16,982	5,005	2,509	7,180
4	42,520	22,567	27,712	310,263	5,295	1,133	25,281	766,019	16,317	4,989	2,747	7,091
5	5,311	938	2,268	16,285	.....	.....	2,307	39,904	665	16	.....	89
6	.....	.....	.....	.....	404	428	.....	.....	.....	.....	238	.....
7	5.93	2.91	3.72	40.52	.60	.09	3.42	.....	25.51	7.52	3.77	10.78

COLLEGIATE INSTITUTES AND

II. TABLE L—BOARDS OF EDUCATION, APPROVED

High Schools—Continued	Value of Household Science Department Equipment: Cookery, Sanitation and Hygiene	Value of Household Science Department Equipment: Handwork and Machine Sewing	Value of Household Science Department Equipment: Laundry Work	Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)	Total value of Special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture
	$	$	$	$	$	$	$
105 Tweed	.....	.....	.....	.....	.....	.....	35,000
106 Uxbridge	.....	.....	.....	.....	.....	.....	10,000
107 Vienna	.....	.....	.....	.....	.....	.....	2,500
108 Walkerton	.....	.....	.....	.....	.....	.....	10,000
109 Wallaceburg	.....	.....	.....	.....	.....	.....	25,000
110 Wardsville	.....	.....	.....	.....	.....	.....	5,000
111 Waterdown	.....	.....	.....	.....	.....	.....	2,000
112 Waterford	.....	.....	.....	.....	.....	.....	15,000
113 Watford	.....	.....	.....	.....	.....	.....	12,500
114 Welland	.....	.....	.....	.....	.....	.....	83,000
115 Weston	.....	.....	.....	122	.....	122	60,000
116 Whitby	.....	.....	.....	651	.....	651	40,000
117 Wiarton	.....	.....	.....	.....	.....	.....	8,500
118 Williamstown	.....	.....	.....	158	.....	158	12,500
119 Winchester	.....	.....	.....	537	.....	537	19,000
120 Wingham	.....	.....	.....	.....	.....	.....	25,000
1 Totals, High Schools	3,991	484	57	4,550	148	13,635	3,248,264
2 Totals, Collegiate Institutes	18,745	1,741	1,744	1,972	1,456	52,929	5,211,899
3 Grand Totals, 1919	22,736	2,225	1,801	6,522	1,604	66,564	8,460,163
4 Grand Totals, 1918	22,210	2,293	1,788	3,793	1,417	62,645	7,904,553
5 Increases	526	.....	13	2,729	187	3,919	555,610
6 Decreases	.....	68	.....	.....	.....	.....	.....
7 Percentages	34.15	3.34	2.70	9.80	2.40	.....	.....

HIGH SCHOOLS—Continued

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.—Concluded

	Religious and other Exercises					Destination of Pupils							
	Schools using authorized Scripture Readings	Schools using the Bible	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
105	1	.....	1	.....	.....	4	3	.....	2	1	6	3	7
106	.....	.....	1	.....	.....	14	13	3	8	2	2	2	3
107	.....	1	1	.....	.....	2	1	.....	4	1	.....	2	1
108	.....	1	.....	.....	1	12	2	2	7	2	5	5	5
109	.....	1	1	.....	1	9	8	1	2	3	6	6	2
110	.....	.....	1	.....	.....	4	3	.....	4	1	.....	2	.....
111	.....	.....	1	.....	.....	3	14	.....	.....	1	7	7	.....
112	1	1	1	.....	1	4	3	.....	3	.....	4	4	5
113	.....	.....	1	.....	1	16	10	.....	5	5	.....	7	1
114	.....	1	1	.....	1	25	9	4	3	2	3	12	4
115	.....	1	1	.....	.....	18	6	1	1	6	1	5	6
116	.....	.....	1	.....	1	9	5	2	4	2	1	8	6
117	1	.....	1	.....	1	2	3	.....	4	1	3	5	11
118	.....	.....	1	.....	1	5	6	.....	3	.....	5	5	2
119	.....	.....	1	.....	.....	7	6	4	5	.....	3	5	.....
120	1	1	1	.....	1	8	19	6	10	.....	12	6	6
1	40	51	119	2	73	1,169	785	168	536	278	621	618	423
2	22	24	47	.....	40	1,703	457	430	568	381	860	641	777
3	62	75	166	2	113	2,872	1,242	598	1,104	659	1,481	1,259	1,200
4	64	72	162	5	104	2,767	1,582	447	1,160	641	1,538	1,101	1,055
5	.....	3	4	.....	9	105	.....	151	.....	18	.....	158	145
6	2	.....	.....	3	.....	.....	340	.....	56	.....	57	.....	.....
7	37.12	44.91	.99	1.19	67.66	27.57	11.92	5.74	10.60	6.32	14.22	12.09	11.52

COLLEGIATE INSTITUTES

III. TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS

Collegiate Institutes	Pupils					Number of Pupils in—				Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial Dis.	Other Counties or Districts
						F. I	F. II					
1 Barrie	267	115	117	150	219	118	69	64	16	152	114	1
2 Brantford	598	220	264	334	495	244	170	148	36	444	140	14
3 Brockville	323	125	137	186	233	125	88	85	25	214	109	.....
4 Chatham	365	122	148	217	272	172	111	64	18	239	117	9
5 Clinton	186	57	73	113	143	60	64	42	20	86	99	1
6 Cobourg	175	50	79	96	143	76	51	40	8	118	57	.....
7 Collingwood	206	64	80	126	171	83	52	50	21	162	32	12
8 Fort William	339	128	155	184	282	159	92	83	5	331	5	3
9 Galt	372	128	182	190	329	147	128	69	28	184	153	35
10 Goderich	188	51	58	130	150	65	54	57	12	122	64	2
11 Guelph	386	148	190	196	300	176	98	85	27	313	61	12
12 Hamilton	859	315	451	408	708	315	213	258	73	756	84	19
13 Ingersoll	184	70	90	94	158	74	56	49	5	116	55	13
14 Kingston	625	175	321	304	512	208	164	243	10	507	107	11
15 Kitchener–Waterloo	317	140	160	157	270	140	83	78	16	280	34	3
16 Lindsay	344	128	164	180	296	137	86	93	28	170	122	52
17 London	1,216	448	569	647	982	551	363	235	67	1,020	192	4
18 Morrisburg	125	31	45	80	103	35	55	28	7	59	60	6
19 Napanee	179	55	58	121	141	63	58	47	11	87	84	8
20 Niagara Falls	296	99	140	156	238	107	104	68	17	236	34	26
21 North Bay	269	111	100	169	227	135	74	51	9	243	5	21
22 Orillia	298	101	107	191	252	112	97	78	11	199	62	37
23 Ottawa	1,351	451	761	590	1,086	536	396	383	36	1,238	67	46
24 Owen Sound	405	130	171	234	337	151	99	121	34	290	104	11
25 Perth	189	61	78	111	150	77	45	57	10	107	79	3
26 Peterborough	405	139	186	219	370	165	140	81	19	341	52	12
27 Picton	245	80	95	150	206	99	82	54	10	105	135	5
28 Port Arthur	230	95	84	146	188	135	58	35	2	230	.....	.....
29 Renfrew	258	93	114	144	237	116	90	38	14	121	130	7
30 St. Catharines	456	164	207	249	359	230	143	66	17	343	97	16
31 St. Mary's	210	63	85	125	179	93	59	48	10	125	55	30
32 St. Thomas	513	179	258	255	427	201	172	112	28	419	91	3
33 Sarnia	373	146	166	207	320	167	111	75	20	307	66	.....
34 Seaforth	178	54	83	95	155	54	49	54	21	71	98	9
35 Smith's Falls	266	101	91	175	221	128	69	59	10	192	31	43
36 Stratford	411	156	189	222	355	164	115	101	31	300	80	31
37 Strathroy	173	53	77	96	150	63	37	66	7	111	61	1
38 Toronto, Harbord	701	237	348	353	566	232	200	229	40	699	.....	2
39 Toronto, Humberside	536	184	268	268	419	215	124	175	22	511	23	2
40 Toronto, Jarvis	537	172	325	212	429	189	153	169	26	531	1	5
41 Toronto, Malvern	297	125	145	152	243	128	79	82	8	270	27	.....
42 Toronto, Oakwood	843	304	385	458	720	309	232	252	50	803	36	4
43 Toronto, Parkdale	597	218	305	292	504	218	160	194	25	582	11	4
44 Toronto, Riverdale	546	198	289	257	445	212	154	156	24	540	6	.....
45 Vankleek Hill	150	42	51	99	122	55	46	38	11	54	77	19
46 Windsor	574	250	260	314	516	255	194	105	20	378	194	2
47 Woodstock	428	155	181	247	389	170	123	103	32	203	201	24
Totals	18,989	6,731	8,890	10,099	15,717	7,664	5,460	4,868	997	14,909	3,512	568

AND HIGH SCHOOLS—Continued
AND IN THE VARIOUS SUBJECTS, ETC.

	Number of Pupils from Families whose Head is occupied as below—								Number of Pupils in the Various Subjects						
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediæval History
1	38	87	7	2	46	16	49	22	197	263	261	197	257	60	8
2	97	125	40	4	181	20	90	41	414	580	580	562	562	148	20
3	54	105	8	2	111	23	17	3	195	317	318	212	185	83	12
4	64	135	14	3	75	40	34	.....	245	357	357	347	347	64	10
5	30	94	10	3	18	14	17	.....	124	179	179	166	120	42	5
6	14	59	9	2	47	1	20	23	127	172	172	167	173	40	4
7	52	36	7	....	66	17	13	15	135	200	200	185	96	50	6
8	66	7	3	2	121	27	113	.....	184	321	321	221	164	61	1
9	118	64	9	12	126	12	31	.....	187	361	361	346	337	70	7
10	29	69	20	1	34	12	19	4	119	185	185	176	176	57	6
11	103	61	18	6	91	22	67	18	247	351	351	309	180	86	12
12	381	74	57	20	182	63	58	24	528	856	856	786	786	258	33
13	33	67	5	....	38	13	17	11	141	184	184	117	99	43	3
14	143	101	39	22	142	44	127	7	369	625	625	367	243	228	5
15	182	21	30	10	52	.....	6	16	200	289	315	298	298	75	2
16	62	143	12	4	47	28	33	15	161	286	305	278	280	91	5
17	526	157	69	17	341	19	29	58	817	1,085	1,085	1,135	1,135	235	16
18	6	60	4	....	23	11	19	2	90	125	125	118	118	28	7
19	32	74	9	3	15	14	20	12	80	175	175	160	160	25	3
20	70	52	9	1	68	40	29	27	175	296	296	279	279	46	6
21	12	17	6	2	80	82	52	18	209	269	269	209	125	51	2
22	80	95	13	2	65	28	11	4	191	295	295	269	174	77	7
23	344	83	81	46	244	70	433	50	901	1,339	1,337	689	779	120	21
24	98	113	15	3	87	39	38	12	216	396	390	216	220	113	7
25	31	92	.....	5	18	17	13	13	122	188	188	175	104	27	6
26	124	45	20	6	116	30	31	33	199	402	402	242	221	81	4
27	34	110	11	2	18	28	37	5	157	245	245	211	136	54	3
28	57	8	3	5	76	18	48	15	179	229	229	135	73	35	....
29	42	138	6	4	36	20	10	2	206	255	255	244	244	38	8
30	119	52	6	5	191	52	16	15	328	452	452	328	196	64	10
31	35	90	5	3	38	18	15	6	152	208	210	200	200	48	2
32	161	112	11	8	175	36	10	.....	373	490	490	485	485	112	10
33	84	46	19	3	105	65	30	21	204	370	369	350	350	116	17
34	15	96	8	4	22	17	13	3	103	170	170	155	155	50	12
35	45	71	7	1	55	25	60	2	182	256	256	251	122	31	3
36	90	86	18	6	85	20	73	33	239	391	391	380	391	101	20
37	24	89	10	3	15	24	3	5	101	171	171	157	103	65	5
38	450	1	25	10	100	.....	40	75	434	700	701	496	313	229	25
39	165	15	26	20	125	17	115	53	339	534	534	390	330	171	6
40	122	18	39	11	112	46	131	58	218	519	519	301	310	165	8
41	115	9	24	3	87	5	30	24	207	297	297	164	161	82	4
42	335	20	54	29	219	25	151	10	541	832	832	423	346	252	26
43	222	25	30	15	162	30	104	9	375	591	591	323	349	192	7
44	126	5	24	13	131	.....	210	37	366	546	546	363	310	159	7
45	12	94	7	1	6	8	18	4	101	137	138	128	83	36	....
46	172	29	31	6	55	195	43	43	353	562	562	255	237	105	8
47	102	168	23	3	48	10	66	8	264	413	413	392	243	102	13
	5,316	3,318	901	333	4,295	1,361	2,609	856	11,995	18,464	18,503	14,357	12,755	4,466	412

COLLEGIATE INSTITUTES

III. TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS

Number of Pupils in the Various Subjects—Continued

Collegiate Institutes	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
1 Barrie	7	197	197	197	227	178	12	200	....	3	201	...
2 Brantford	6	414	414	414	578	302	20	564	....	20	420	3
3 Brockville	4	228	164	259	267	165	10	293	....	10	221	10
4 Chatham	13	283	245	283	359	149	12	214	....	9	213	6
5 Clinton	8	124	124	126	177	117	9	133	....	16	150	4
6 Cobourg	4	147	107	147	172	76	5	100	....	3	101	1
7 Collingwood	2	135	135	135	204	111	17	197	....	4	190	3
8 Fort William	1	251	251	252	252	132	4	319	....	.....	225	...
9 Galt	7	277	187	230	297	183	15	331	....	26	257	3
10 Goderich	7	119	96	121	186	97	9	113	....	14	98	1
11 Guelph	8	247	247	248	348	187	14	306	....	32	306	18
12 Hamilton	35	528	527	528	846	531	60	528	62	75	830	19
13 Ingersoll	3	131	130	154	179	92	2	165	....	6	152	5
14 Kingston	5	367	372	389	533	358	5	621	....	14	516	...
15 Kitchener-Waterloo	...	223	200	226	291	151	14	209	....	41	198	11
16 Lindsay	8	216	136	181	315	164	16	206	....	6	206	6
17 London	16	914	817	914	943	535	35	931	....	20	868	9
18 Morrisburg	...	90	90	90	125	90	7	75	....	.....	75	4
19 Napanee	3	80	83	121	135	72	11	115	....	10	130	8
20 Niagara Falls	...	156	107	229	275	138	17	238	....	12	196	...
21 North Bay	2	209	158	209	264	109	4	244	....	22	204	...
22 Orillia	4	209	112	209	295	165	6	205	....	14	209	3
23 Ottawa	16	641	561	781	1,303	724	55	1,227	....	90	978	18
24 Owen Sound	8	250	151	250	356	208	19	260	....	10	241	1
25 Perth	2	122	115	122	186	109	7	182	....	14	117	1
26 Peterborough	5	305	165	305	399	189	12	296	....	17	292	...
27 Picton	10	181	157	181	240	120	8	134	....	.....	119	...
28 Port Arthur	...	193	135	193	230	81	2	165	....	8	164	...
29 Renfrew	8	206	206	206	252	124	7	188	....	1	170	5
30 St. Catharines	9	373	360	373	402	173	9	287	....	44	313	7
31 St. Mary's	2	152	152	152	209	103	9	149	....	11	160	5
32 St. Thomas	9	373	172	373	490	284	14	265	....	11	246	...
33 Sarnia	7	278	247	235	371	300	17	279	43	2	237	4
34 Seaforth	9	103	103	103	157	115	12	139	....	15	159	10
35 Smith's Falls	3	192	182	192	256	163	6	202	....	17	197	4
36 Stratford	18	239	164	239	391	391	20	175	....	25	259	...
37 Strathroy	2	101	92	101	171	108	5	142	....	.....	147	3
38 Toronto, Harbord	13	432	432	433	696	463	22	686	....	168	671	33
39 Toronto, Humberside	5	339	252	339	530	316	20	484	....	94	480	19
40 Toronto, Jarvis	8	340	218	218	517	332	18	475	....	159	463	5
41 Toronto, Malvern	4	207	172	207	297	168	6	291	....	40	291	...
42 Toronto, Oakwood	26	541	354	541	823	821	46	829	....	146	813	26
43 Toronto, Parkdale	6	378	218	365	581	366	20	551	....	101	524	18
44 Toronto, Riverdale	6	366	254	366	546	334	24	536	....	69	523	15
45 Vankleek Hill	11	101	101	101	136	91	9	128	....	.....	134	...
46 Windsor	8	377	232	449	379	249	10	450	....	16	291	...
47 Woodstock	8	293	293	264	332	213	20	393	....	29	311	9
Totals	346	12,628	10,387	12,751	17,518	10,647	701	15,220	105	1,444	14,266	297

AND HIGH SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of Pupils in the Various Subjects—Continued											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
1	80	80	148	261	5	118	60	35	35	57	265	35	....	....	.....	10
2	290	290	136	440	2	162	142	144	144	170	590	142	....	176	234	6
3	116	116	87	87	3	143	82	49	49	101	321	.....	....	....	.....	...
4	215	215	146	275	4	210	125	79	79	122	364	79	....	96	108	12
5	134	134	136	176	10	124	60	.....	.....	138	186	.....	118	.....	.....	14
6	60	60	71	104	....	96	60	62	67	54	170	.....	44	.....	70	...
7	102	102	92	156	2	95	35	35	35	87	206	35	....	46	88	6
8	145	145	127	247	....	270	85	86	87	187	339	87	....	113	118	...
9	90	90	77	271	2	226	88	88	88	97	365	88	....	124	139	4
10	50	50	99	148	9	88	72	42	23	45	180	42	.....	.....	.....	...
11	147	147	202	302	3	57	92	62	65	139	376	66	.....	.....	.....	...
12	541	541	276	807	7	315	.....	.....	.....	526	855	.....	.....	266	262	6
13	87	87	89	146	1	130	.....	.....	.....	87	184	29	65	46	64	...
14	38	38	236	514	1	262	97	97	97	79	598	119	.....	.....	.....	...
15	42	42	90	227	1	166	68	56	79	60	315	.....	.....	123	141	3
16	78	78	149	256	5	58	58	58	58	82	337	58	.....	.....	.....	14
17	413	413	365	772	8	648	230	230	95	507	1,192	235	16	200	245	9
18	80	80	84	125	....	90	17	17	17	85	123	17	.....	.....	.....	...
19	62	62	68	68	....	114	81	45	45	56	179	45	.....	.....	.....	10
20	146	146	116	202	....	156	84	89	60	27	296	86	.....	.....	114	...
21	65	65	77	203	....	155	55	56	56	56	269	57	.....	.....	.....	...
22	119	119	161	217	3	112	197	66	66	120	294	66	.....	.....	.....	...
23	128	128	643	1,065	7	645	171	155	109	719	1,340	173	....	12	24	119
24	348	346	200	295	6	149	84	84	84	167	392	34	....	74	136	24
25	115	115	59	63	....	77	31	9	10	119	189	9	.....	.....	.....	...
26	95	95	79	230	2	207	87	88	67	83	395	86	....	60	44	9
27	151	151	54	179	....	181	86	82	78	112	244	62	.....	.....	.....	...
28	48	48	76	135	....	63	63	63	63	129	225	63	....	73	100	...
29	193	193	182	204	5	206	49	49	23	132	254	49	94	.....	.....	...
30	121	121	134	285	3	150	23	.....	.....	73	456	125	....	.....	.....	4
31	111	111	99	177	....	152	88	29	29	48	210	28	.....	.....	.....	10
32	209	209	122	126	2	290	146	146	81	110	500	146	120	30	148	7
33	103	103	160	296	3	198	70	70	70	106	265	70	....	.....	.....	5
34	111	111	165	169	8	103	103	.....	.....	110	176	.....	.....	.....	.....	7
35	150	150	114	210	3	138	45	50	50	147	263	50	12	64	128	...
36	175	175	155	250	8	75	75	75	75	200	385	.....	....	80	112	8
37	80	80	105	150	2	101	59	21	21	80	172	21	....	.....	.....	2
38	416	416	398	639	2	462	30	.....	.....	266	692	.....	.....	.....	.....	...
39	78	78	131	390	2	215	10	.....	.....	98	520	.....	.....	.....	.....	6
40	223	221	269	433	4	.....	67	.....	.....	157	513	.....	.....	.....	.....	...
41	208	208	161	161	....	128	52	.....	.....	162	297	.....	.....	.....	.....	18
42	325	325	228	474	5	354	289	.....	.....	374	843	.....	....	254	278	23
43	286	286	363	586	....	.....	218	.....	.....	248	585	.....	.....	.....	.....	10
44	365	365	312	524	8	212	82	.....	.....	266	543	.....	....	180	185	27
45	100	100	95	136	10	101	30	9	10	92	150	11	47	.....	.....	...
46	4	4	110	110	4	163	163	163	72	200	558	163	....	204	219	6
47	142	142	110	242	10	293	86	86	86	116	421	83	....	126	172	6
	7,385	7,381	7,556	13,543	160	8,458	3,995	2,575	2,173	7,196	18,592	2,459	516	2,347	3,129	385

COLLEGIATE INSTITUTES

III. TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS AND

High Schools	Pupils					Number of Pupils in—				Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary Sch'l.	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School F. I	Lower School F. II	Middle School	Upper School	Municipalities forming High School Dis't.	Municipalities within the County or Territorial District	Other Counties or Districts
1 Alexandria	106	48	35	71	88	63	28	15	.....	99	6	1
2 Alliston	88	26	24	64	75	34	28	26	.....	43	37	8
3 Almonte	101	41	43	58	74	47	34	14	6	58	41	2
4 Amherstburg	49	22	21	28	34	22	9	18	.....	32	17	....
5 Arnprior	207	77	77	130	186	86	57	53	11	136	69	2
6 Arthur	80	20	29	51	66	32	23	20	5	38	42	....
7 Athens	155	61	57	98	130	69	36	50	.....	79	75	1
8 Aurora	113	36	52	61	90	41	28	35	9	63	50	....
9 Avonmore	75	25	28	47	36	25	29	21	.....	61	14	....
10 Aylmer	128	44	51	77	102	51	45	24	8	45	82	1
11 Beamsville	88	38	40	48	70	39	32	17	.....	36	52	....
12 Belleville	330	49	150	180	254	123	110	79	18	261	58	11
13 Bowmanville	125	37	50	75	101	48	34	31	12	81	44	....
14 Bracebridge	133	46	57	76	94	38	72	23	.....	79	52	2
15 Bradford	60	13	27	33	43	28	18	14	.....	23	37	....
16 Brampton	175	58	68	107	147	60	44	58	13	91	77	7
17 Brighton	65	26	22	43	51	27	17	21	.....	29	35	1
18 Burlington	73	23	28	45	57	23	26	24	.....	41	29	3
19 Caledonia	104	35	30	74	89	43	31	30	.....	41	47	16
20 Campbellford	170	41	73	97	124	68	40	43	19	84	78	8
21 Carleton Place	158	49	63	95	132	62	40	56	.....	96	32	30
22 Cayuga	78	24	23	55	68	40	20	16	2	33	45	....
23 Chatsworth	33	10	19	14	24	10	7	16	.....	31	1	1
24 Chesley	98	37	38	60	83	41	31	23	3	50	38	10
25 Chesterville	101	30	39	62	73	37	39	25	.....	42	46	13
26 Colborne	58	19	26	32	45	20	22	16	.....	28	30	....
27 Cornwall	241	76	87	154	197	92	78	58	13	123	100	18
28 Deseronto	58	13	19	39	48	21	23	14	.....	40	13	5
29 Dundalk	60	19	23	37	50	19	19	18	4	24	23	13
30 Dundas	126	42	60	66	88	63	29	20	14	124	2	....
31 Dunnville	131	51	58	73	108	50	42	36	3	67	64	....
32 Durham	107	52	42	65	91	52	31	22	2	46	61	....
33 Dutton	126	41	50	76	94	49	35	32	10	39	87	....
34 Elora	53	11	20	33	42	23	21	9	.....	21	30	2
35 Essex	170	77	77	93	125	69	61	34	6	41	129	....
36 Exeter	97	31	40	57	77	36	33	28	.....	41	56	....
37 Fergus	131	46	56	75	104	45	45	28	13	59	66	6
38 Flesherton	65	28	24	41	50	28	23	14	.....	57	8	....
39 Forest	108	39	49	59	81	49	34	23	2	44	64	....
40 Fort Frances	58	31	16	42	49	37	14	7	.....	43	14	1
41 Gananoque	120	53	49	71	99	57	32	31	.....	94	19	7
42 Georgetown	119	32	66	53	90	42	34	37	6	49	43	27
43 Glencoe	69	22	24	45	52	25	23	19	2	16	46	7
44 Gravenhurst	36	13	17	19	29	14	10	9	3	28	8	....
45 Grimsby	123	42	54	69	87	54	38	31	.....	43	54	26
46 Hagersville	109	28	49	60	84	45	32	25	7	42	67	....
47 Haileybury	133	52	67	66	100	69	33	25	6	62	71	....
48 Harriston	100	24	55	45	80	27	28	27	18	40	29	31
49 Hawkesbury	88	27	43	45	68	34	32	22	.....	61	27	....
50 Iroquois	105	21	33	72	95	31	43	29	2	35	69	1
51 Kemptville	118	24	36	82	98	35	45	32	6	43	56	19
52 Kenora	118	42	41	77	97	47	52	19	.....	116	1	1

AND HIGH SCHOOLS—Continued

IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of Pupils from Families whose Head is occupied as below—								Number of Pupils in the Various Subjects						
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring Occupations	Other Occupations	Without Occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediæval History
1	6	59	4	....	7	6	15	9	91	106	106	106	43	15	....
2	15	39	4	1	5	6	10	8	62	88	88	60	54	26	....
3	22	49	5	....	12	8	4	1	81	100	100	95	95	14	1
4	12	14	5	1	4	8	5	....	31	49	49	45	26	18	....
5	36	40	8	....	45	26	50	2	143	205	205	196	196	53	9
6	17	37	3	....	7	10	1	5	55	79	79	75	43	20	4
7	14	99	8	4	15	8	5	2	121	153	153	154	154	49	....
8	15	50	12	2	16	6	8	4	69	113	113	94	94	35	6
9	4	44	3	....	6	1	2	15	54	75	75	75	36	6	....
10	16	76	6	....	17	13	.....	....	96	124	124	120	69	24	2
11	3	57	6	5	2	8	5	2	71	88	88	88	88	17	....
12	87	71	13	2	98	10	44	5	193	303	307	289	289	79	5
13	30	46	7	1	15	15	6	5	76	122	122	79	65	31	1
14	8	52	3	1	18	24	22	5	110	133	133	61	95	23	....
15	8	38	5	....	4	2	2	1	46	59	59	59	59	13	....
16	17	81	4	1	22	30	5	15	104	170	170	139	162	62	3
17	12	37	3	3	3	.....	7	....	44	59	57	57	57	18	....
18	5	36	7	....	1	9	13	2	49	73	73	73	50	24	....
19	18	48	5	1	12	10	10	....	74	102	102	73	61	28	....
20	32	64	7	....	24	16	15	12	106	165	165	143	143	40	13
21	30	58	3	3	26	20	14	4	102	156	156	155	96	56	....
22	11	45	6	1	8	6	1	....	60	77	77	76	36	1	....
23	.....	28	1	1	1	1	1	....	17	33	33	33	23	16	....
24	29	42	3	1	6	9	8	....	72	95	95	95	54	24	....
25	19	62	2	....	5	6	5	2	74	101	101	101	64	25	....
26	6	22	2	1	6	8	6	7	43	58	58	58	58	58	....
27	29	73	12	5	57	14	47	4	153	235	230	219	219	55	8
28	6	17	2	2	13	10	7	1	44	58	58	58	58	14	....
29	5	32	6	1	5	10	1	....	38	60	60	56	37	18	4
30	11	39	7	....	35	3	28	3	92	126	126	113	49	20	14
31	31	57	7	1	18	15	.....	2	92	130	130	112	112	36	2
32	.....	56	2	2	21	17	8	1	83	107	107	105	105	22	2
33	3	77	8	....	12	15	10	1	84	123	123	81	67	32	4
34	.....	30	2	....	....	9	12	....	44	53	53	53	53	9	....
35	31	96	12	....	19	4	7	1	128	170	170	164	101	34	5
36	17	51	3	1	15	2	7	1	79	97	93	60	57	24	....
37	19	53	3	6	40	10	.....	....	131	131	131	126	131	28	7
38	5	42	3	....	7	4	4	....	51	65	65	65	37	14	....
39	13	65	8	....	7	8	.....	7	83	83	106	106	59	23	....
40	5	11	5	1	14	6	14	2	51	58	58	43	21	7	....
41	19	26	4	2	30	11	23	5	89	120	120	88	63	31	....
42	23	45	6	1	31	4	7	2	86	119	119	113	113	37	4
43	7	46	3	....	1	3	4	5	47	68	67	63	40	18	2
44	8	6	1	....	9	4	2	6	24	36	36	36	36	9	3
45	16	67	3	1	18	2	11	5	92	123	121	121	67	29	....
46	17	63	8	....	4	12	.....	5	77	106	107	70	57	25	4
47	10	9	6	5	76	5	17	5	90	133	133	84	57	19	2
48	12	45	9	1	12	4	9	8	55	97	97	82	55	27	9
49	14	28	6	....	25	4	9	2	66	54	88	88	54	22	....
50	14	67	1	....	2	4	8	9	74	103	103	60	72	29	....
51	22	62	6	....	11	1	12	4	80	112	112	112	112	32	....
52	17	7	2	....	28	38	22	4	99	118	118	118	118	19	....

COLLEGIATE INSTITUTES

III. TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS

High Schools	Number of Pupils in the Various Subjects											
	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
1 Alexandria	....	91	91	91	106	43	.....	105	....	....	105	....
2 Alliston	....	72	72	72	88	54	.....	92	....	....	70	....
3 Almonte	2	81	81	81	100	53	5	58	....	1	69	....
4 Amherstburg	....	27	31	31	45	27	.....	38	....	....	40	....
5 Arnprior	4	143	143	143	203	116	7	194	....	21	181	....
6 Arthur	....	55	55	55	79	48	4	38	....	3	48	....
7 Athens	....	105	105	121	153	84	.....	92	....	....	125	....
8 Aurora	1	69	69	69	113	72	9	101	....	....	95	....
9 Avonmore	....	54	54	54	75	36	.....	37	....	....	34	....
10 Aylmer	4	96	96	96	124	71	3	102	....	....	95	....
11 Beamsville	....	71	71	71	88	49	.....	88	....	....	88	....
12 Belleville	12	233	233	233	312	177	9	262	....	4	262	1
13 Bowmanville	8	82	48	75	123	72	8	100	....	2	100	1
14 Bracebridge	....	110	70	110	133	95	.....	112	....	....	104	....
15 Bradford	....	46	46	46	59	59	.....	58	....	....	57	....
16 Brampton	2	104	60	104	170	170	7	171	....	18	168	10
17 Brighton	....	44	44	45	64	35	.....	47	....	....	51	....
18 Burlington	....	49	49	49	73	50	.....	68	....	....	65	....
19 Caledonia	....	74	74	77	103	101	.....	96	....	....	92	....
20 Campbellford	5	106	106	106	166	98	14	154	....	6	155	....
21 Carleton Place	....	102	102	102	157	94	.....	141	....	....	144	....
22 Cayuga	....	60	60	60	78	38	1	72	....	....	72	....
23 Chatsworth	....	17	17	17	33	23	.....	26	....	....	30	....
24 Chesley	3	72	72	72	96	54	.....	77	....	6	80	....
25 Chesterville	....	76	76	74	101	64	.....	88	....	....	76	....
26 Colborne	....	43	43	43	58	37	.....	50	....	....	51	....
27 Cornwall	8	163	92	165	232	128	9	147	....	4	157	....
28 Deseronto	....	44	44	44	58	37	.....	41	....	....	44	....
29 Dundalk	4	38	38	38	60	41	4	50	....	....	50	....
30 Dundas	....	92	92	92	99	57	14	112	....	....	99	....
31 Dunnville	1	92	92	92	130	130	2	121	....	1	129	7
32 Durham	....	83	83	83	107	55	2	45	....	....	77	....
33 Dutton	3	84	84	84	123	73	7	74	....	....	70	....
34 Elora	....	44	44	44	53	30	.....	45	....	....	40	....
35 Essex	....	128	128	128	170	101	6	159	....	3	157	....
36 Exeter	....	69	69	69	95	59	.....	66	....	....	66	....
37 Fergus	6	131	131	90	126	126	7	125	....	....	128	....
38 Flesherton	....	51	51	51	65	37	.....	37	....	....	50	....
39 Forest	2	83	83	83	106	55	.....	93	....	....	94	....
40 Fort Frances	....	50	51	51	57	21	.....	40	....	....	40	....
41 Gananoque	....	89	89	89	120	63	.....	92	....	....	83	....
42 Georgetown	1	76	42	75	118	75	4	75	....	1	90	1
43 Glencoe	....	47	48	48	69	44	2	36	....	....	35	....
44 Gravenhurst	....	24	24	24	36	22	3	31	....	....	33	....
45 Grimsby	....	92	92	92	122	67	.....	109	....	....	114	....
46 Hagersville	3	77	77	77	106	101	4	97	....	....	97	....
47 Haileybury	....	102	90	102	133	62	19	74	....	....	73	....
48 Harriston	4	55	55	55	98	71	14	80	....	6	89	....
49 Hawkesbury	....	66	66	66	87	52	.....	88	....	....	81	....
50 Iroquois	2	74	74	74	103	72	.....	79	....	....	92	....
51 Kemptville	6	81	79	81	112	77	.....	103	....	....	106	....
52 Kenora	....	99	99	99	118	45	.....	68	....	....	60	....

AND HIGH SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of Pupils in the Various Subjects—Continued										Special Courses					
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
1	91	91	15	106	....	91	....	....	....	91	106	....	....	....	....	....
2	62	62	88	88	....	62	....	....	....	68	88	....	....	....	....	7
3	82	82	48	98	....	81	12	....	....	81	100	....	....	....	....	....
4	27	27	27	45	....	31	....	....	....	22	49	....	....	....	....	....
5	4	4	53	53	....	143	....	....	....	143	204	....	....	....	....	....
6	55	55	43	79	....	32	....	....	....	55	79	....	61	....	....	....
7	105	105	84	154	....	69	....	....	....	105	154	....	58	....	....	....
8	69	69	63	110	....	69	41	....	....	72	113	....	....	....	....	5
9	54	54	36	36	....	54	....	....	....	54	74	....	....	....	....	....
10	101	101	76	125	6	51	....	....	....	96	128	....	....	....	....	....
11	71	71	49	88	....	71	....	....	....	71	88	....	30	....	38	....
12	222	222	233	303	5	135	66	44	44	81	328	50	21	....	66	3
13	.....	.....	31	122	....	48	....	....	....	82	125	....	40	....	....	....
14	110	110	95	133	....	70	....	....	....	110	133	....	....	....	....	....
15	46	46	31	59	....	46	....	....	....	46	60	....	....	....	....	....
16	1	1	109	165	3	60	12	....	....	98	175	....	....	....	....	....
17	44	44	37	64	....	44	....	....	....	39	65	....	....	....	....	....
18	49	49	50	73	....	23	....	....	....	47	73	....	....	....	....	....
19	74	74	59	102	....	43	....	....	....	74	104	....	....	....	....	....
20	111	111	86	165	5	108	70	8	8	106	168	2	....	....	....	....
21	102	102	94	156	....	62	....	....	....	102	153	....	....	....	....	....
22	60	60	36	76	....	60	40	....	....	60	78	....	....	....	....	....
23	17	17	23	33	....	17	....	....	....	17	33	....	....	....	....	....
24	75	75	78	95	3	.....	....	....	....	76	95	....	....	....	....	....
25	65	65	64	101	....	37	....	....	....	64	100	....	....	....	....	....
26	40	40	37	58	....	43	....	....	....	40	58	....	....	....	....	....
27	148	148	122	203	7	109	72	29	29	104	238	29	....	....	68	....
28	44	44	37	58	....	44	....	....	....	32	58	....	....	....	....	....
29	38	38	37	56	....	38	....	....	....	38	60	....	....	....	....	....
30	65	65	43	57	....	92	48	27	27	92	126	27	....	....	....	....
31	93	93	125	125	1	92	10	10	10	88	131	....	....	....	....	....
32	83	83	53	107	....	83	....	....	....	90	107	....	....	....	....	5
33	87	87	70	123	3	49	....	....	....	84	126	....	....	....	....	....
34	44	44	53	30	....	44	....	....	....	40	53	....	....	....	....	....
35	121	121	164	164	....	128	....	....	....	127	163	....	70	....	....	....
36	.....	65	59	95	....	36	....	....	....	65	97	....	....	....	....	....
37	104	104	128	128	4	131	....	....	....	90	131	....	....	....	....	....
38	51	51	37	65	....	51	13	....	....	51	65	....	....	....	....	....
39	85	85	25	106	2	83	....	....	....	83	108	....	....	....	....	....
40	50	50	21	50	....	50	26	18	18	50	58	20	....	....	....	....
41	89	89	63	120	....	89	20	....	47	67	120	....	....	....	....	....
42	52	52	75	114	....	76	14	7	14	32	119	....	12	....	....	1
43	47	47	66	68	....	47	....	....	....	47	69	....	....	....	....	....
44	24	24	22	36	....	24	14	3	10	24	36	....	....	....	....	....
45	92	92	68	123	....	92	....	....	....	92	123	....	....	....	....	....
46	79	79	60	106	3	77	....	....	....	77	106	....	....	....	....	....
47	39	39	68	122	29	69	....	....	....	43	131	....	....	....	....	....
48	58	58	58	91	4	27	....	....	....	52	99	....	....	....	....	....
49	66	66	52	86	....	66	....	....	....	66	88	....	....	....	....	....
50	76	76	74	72	2	74	....	....	12	74	105	....	....	....	....	....
51	85	85	83	112	6	35	35	....	....	79	118	....	....	....	....	....
52	25	25	32	32	....	99	73	45	45	25	116	....	....	....	....	....

COLLEGIATE INSTITUTES

III. TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS

High Schools—Continued	Pupils					Number of Pupils in—				Number of Pupils from—	
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial District
						F. I	F. II				
53 Kincardine	158	45	52	106	136	56	45	50	7	76	82
54 Leamington	202	71	89	113	159	78	69	44	11	85	90
55 Listowel	156	51	74	82	127	66	28	51	11	76	66
56 Lucan	87	34	52	35	63	44	22	17	4	34	53
57 Madoc	102	31	32	70	60	33	39	28	2	36	64
58 Markdale	53	19	20	33	44	19	19	15	....	51	2
59 Markham	117	36	49	68	86	36	31	32	18	22	87
60 Meaford	119	46	46	73	104	59	41	13	6	84	34
61 Midland	128	45	50	78	102	55	34	33	6	110	18
62 Milton	111	48	38	73	82	55	28	28	....	51	60
63 Mitchell	95	33	43	52	83	39	30	26	....	50	45
64 Morewood	42	4	26	16	29	6	24	12	....	33	3
65 Mount Forest	118	43	50	68	95	46	35	33	4	51	30
66 Newburgh	82	24	21	61	55	36	33	13	....	21	61
67 Newcastle	18	8	6	12	15	8	6	4	....	10	8
68 Newmarket	204	70	93	111	153	94	51	44	15	93	97
69 Niagara	27	8	10	17	23	13	9	5	....	21	6
70 Niagara Falls South	111	39	57	54	90	45	43	15	8	60	51
71 Norwood	80	27	33	47	68	32	32	16	....	36	32
72 Oakville	128	52	62	66	96	58	41	29	....	59	69
73 Omemee	41	17	14	27	35	19	11	11	....	16	20
74 Orangeville	148	56	64	84	91	65	39	36	8	73	38
75 Oshawa	210	80	101	109	169	90	79	29	12	175	20
76 Paris	104	37	43	61	88	49	34	11	10	62	39
77 Parkhill	128	43	51	77	103	45	51	23	9	41	72
78 Parry Sound	84	49	27	57	69	49	23	12	....	70	13
79 Pembroke	180	59	103	77	137	69	52	55	4	144	34
80 Penetanguishene	62	29	25	37	52	37	11	14	....	53	8
81 Petrolia	136	58	59	77	111	64	38	31	3	79	56
82 Plantagenet	53	17	23	30	42	19	26	8	....	41	10
83 Port Dover	59	29	24	35	50	30	17	12	....	43	13
84 Port Elgin	73	18	23	50	53	28	25	20	....	32	41
85 Port Hope	146	54	63	83	123	60	45	38	3	102	44
86 Port Perry	87	27	44	43	72	30	33	17	7	31	37
87 Port Rowan	32	12	15	17	23	15	12	5	....	13	19
88 Prescott	110	42	57	53	85	47	33	22	8	79	31
89 Richmond Hill	73	26	29	44	52	29	27	17	....	15	57
90 Ridgetown	147	54	64	83	106	54	59	26	8	59	88
91 Rockland	31	12	15	16	21	15	8	8	....	24	7
92 Sault Ste. Marie	289	110	127	162	273	136	83	59	11	272	17
93 Shelburne	76	28	35	41	59	30	20	26	....	41	30
94 Simcoe	145	45	58	87	107	48	33	52	12	54	91
95 Smithville	59	17	28	31	50	18	20	21	....	27	25
96 Stirling	76	32	33	43	62	30	20	24	2	27	47
97 Streetsville	41	17	14	27	23	19	13	9	....	13	28
98 Sudbury	201	73	80	121	158	74	76	38	13	141	56
99 Sydenham	121	45	50	71	102	48	36	33	4	119	.....
100 Thorold	58	22	33	25	45	27	16	15	....	36	11
101 Tillsonburg	121	41	58	63	103	52	39	25	5	69	21
102 Toronto, Commerce	957	472	281	676	765	512	288	*157	....	934	21
103 Toronto, North	262	105	133	129	204	105	72	73	12	237	25
104 Trenton	167	37	64	103	130	53	55	55	4	115	17

* 3rd and 4th years

AND HIGH SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

Number of Pupils from Families whose Head is occupied as below—									Number of Pupils in the various Subjects						
Other Counties or Districts	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediæval History
53	20	80	6	11	21	5	15	101	157	157	101	95	50	5
54 27	36	102	7 2	31	1	15	8	147	198	197	191	113	40	2
55 14	31	69	8 4	27	3	6	8	94	155	155	145	100	51	8
56	14	46	8	8	6	3	2	66	83	83	83	49	17	....
57 2	21	49	4	16	4	5	3	72	97	97	72	62	28	2
58	10	27	....	....	5	11	....	38	53	51	51	51	14	....
59 8	12	73	12	6	6	3	5	67	105	105	99	99	32	2
60 1	27	37	5 1	25	16	8	....	89	113	113	113	54	13	....
61	22	22	6 1	28	20	29	....	89	122	122	122	67	33	....
62	22	49	3 4	10	8	15	....	83	111	111	111	56	26	....
63	22	47	3 2	13	5	3	....	69	95	95	94	55	26	....
64 6	2	28	2 4	3	2	1	....	30	40	40	40	34	10	....
65 37	30	62	7	5	1	4	9	81	118	118	114	68	33	4
66	12	59	....	7	2	....	2	69	82	82	82	82	13	....
67	2	11	....	2	1	2	....	14	18	18	18	10	4	....
68 14	37	76	14 5	22	43	4	3	111	202	202	189	116	44	8
69	4	7	 1	8	.....	3	4	24	27	27	27	14	5	....
70	24	28	3 4	30	7	15	....	71	82	82	97	97	15	4
71 12	10	46	2 1	7	8	5	1	64	79	79	79	79	15	....
72	19	53	5 2	19	18	12	....	99	128	128	128	74	29	....
73 5	2	30	2	5	1	1	....	30	41	41	41	22	11	....
74 37	10	64	9	16	2	26	21	104	144	143	140	75	36	2
75 15	38	31	18 1	68	21	18	15	145	208	208	143	108	29	3
76 3	11	42	2	39	4	6	....	80	104	104	60	104	11	10
77 15	16	62	6 1	13	7	19	4	96	128	128	96	83	23	3
78 1	16	6	3	27	14	14	4	72	84	84	84	35	12	....
79 2	26	36	10 1	33	37	23	14	120	179	180	87	96	55	2
80 1	8	9	3	17	12	13	....	48	61	62	62	25	14	....
81 1	15	40	3 2	31	6	39	....	102	136	136	133	69	31	3
82 2	1	32	1	7	3	6	3	45	53	53	53	29	8	....
83 3	8	21	2 2	2	7	15	2	47	59	59	59	59	12	....
84	9	39	2	10	5	4	4	53	73	73	73	45	20	....
85	3	44	2	30	31	36	....	85	145	145	143	143	38	....
86 19	18	42	6 1	7	3	3	7	63	85	85	80	50	17	2
87	3	17	2	2	2	6	....	27	32	32	32	17	5	....
88	17	33	3	24	15	11	7	80	109	109	102	55	22	8
89 1	3	38	4	18	2	2	6	56	73	73	56	44	17	....
90	12	94	3 1	5	6	26	....	113	145	145	139	139	26	6
91	7	10	1	2	11	....	....	23	31	31	31	16	8	....
92	90	19	22 9	89	5	55	....	229	285	285	180	141	59	5
93 5	17	35	13	2	5	3	1	50	73	73	72	42	22	....
94	25	69	11 2	27	10	1	....	81	140	140	81	140	60	5
95 7	10	32	8 1	4	1	1	2	38	59	59	39	41	21	....
96 2	5	45	6	6	4	6	4	50	76	76	76	46	26	2
97	5	19	2 1	5	3	6	....	32	41	41	41	41	9	....
98 4	58	12	14 2	67	42	6	....	108	201	199	150	188	38	....
99 2	19	74	5	3	10	4	6	84	121	121	117	69	31	4
100 11	10	12	 1	27	.....	8	....	43	58	58	58	58	15	....
101 31	32	41	6 3	13	11	12	3	91	120	121	116	116	25	2
102 2	316	10	4 8	373	66	114	66	512	957	957	512	445	.....	....
103	74	10	32 5	98	16	5	22	177	261	261	213	250	73	6
104 35	36	49	10	33	19	10	10	108	167	167	163	163	55	3

COLLEGIATE INSTITUTES

III. TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS

High Schools—Continued	Number of Pupils in the Various Subjects—Continued											
	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
53 Kincardine	2	101	101	101	157	101	6	126	....	10	126	....
54 Leamington	....	148	147	147	201	122	9	174	....	....	161	....
55 Listowel	1	92	92	94	135	87	8	127	....	8	125	....
56 Lucan	4	66	66	66	66	39	....	75	....	....	74	....
57 Madoc	....	72	72	72	97	64	2	59	....	....	66	....
58 Markdale	....	38	38	38	53	34	....	31	....	....	31	....
59 Markham	12	67	67	67	108	73	9	107	....	....	108	....
60 Meaford	6	113	113	96	113	48	....	78	....	1	89	....
61 Midland	3	89	89	89	125	125	4	126	....	....	126	....
62 Milton	....	83	55	84	111	56	....	52	....	....	52	....
63 Mitchell	....	69	69	69	95	56	....	83	....	5	82	....
64 Morewood	....	31	30	30	40	34	....	34	....	....	34	....
65 Mount Forest	....	81	81	81	117	72	3	92	....	3	103	....
66 Newburgh	....	69	69	69	82	46	....	56	....	....	63	....
67 Newcastle	....	14	14	14	18	10	....	18	....	....	18	....
68 Newmarket	4	155	142	128	203	92	14	105	....	4	110	1
69 Niagara	....	24	22	24	27	14	....	26	....	8	26	....
70 Niagara Falls South	4	82	71	88	107	45	4	71	....	....	78	....
71 Norwood	....	64	64	64	80	79	....	73	....	....	74	....
72 Oakville	....	99	99	99	125	74	....	102	....	2	106	....
73 Omemee	....	30	30	30	41	22	....	33	....	....	34	....
74 Orangeville	2	104	104	104	123	77	2	136	....	6	117	2
75 Oshawa	3	169	114	169	151	96	7	200	....	17	147	4
76 Paris	2	80	49	83	101	55	10	64	....	1	44	2
77 Parkhill	....	96	96	96	128	80	6	88	....	....	91	....
78 Parry Sound	....	72	72	72	84	35	....	58	....	....	61	....
79 Pembroke	3	120	80	95	153	99	4	154	....	4	140	6
80 Penetanguishene	....	48	48	48	62	25	....	61	....	....	48	....
81 Petrolia	....	102	102	102	136	72	5	97	....	....	88	....
82 Plantagenet	....	45	45	45	29	29	....	50	....	....	33	....
83 Port Dover	....	47	47	48	59	29	....	35	....	....	36	....
84 Port Elgin	....	53	53	53	73	73	....	58	....	....	56	....
85 Port Hope	1	85	65	85	145	65	1	105	....	9	96	1
86 Port Perry	4	59	60	63	85	55	4	54	....	5	78	....
87 Port Rowan	....	27	27	27	32	17	....	32	....	....	32	....
88 Prescott	....	80	80	80	101	53	8	102	....	....	96	....
89 Richmond Hill	....	56	56	56	73	44	....	64	....	....	63	....
90 Ridgetown	2	113	113	113	145	145	5	129	....	2	135	....
91 Rockland	....	23	23	23	31	16	....	24	....	....	23	....
92 Sault Ste. Marie	....	219	219	219	289	133	11	212	....	....	157	....
93 Shelburne	....	50	50	51	74	74	....	66	....	....	70	....
94 Simcoe	....	81	81	81	130	75	6	55	....	8	70	....
95 Smithville	....	38	38	38	59	41	....	31	4	....	37	....
96 Stirling	....	50	50	51	76	46	2	46	....	....	43	....
97 Streetsville	....	32	32	32	41	22	....	31	....	....	32	....
98 Sudbury	....	140	150	140	140	75	3	117	....	....	98	....
99 Sydenham	....	84	84	84	121	73	4	112	....	1	110	....
100 Thorold	....	43	43	43	58	31	....	54	....	....	46	....
101 Tillsonburg	1	91	91	91	120	61	4	100	....	....	99	....
102 Toronto, Commerce	....	800	471	874	702	.....	....	895	15	....	....	....
103 Toronto, North	5	177	177	177	259	154	7	259	....	63	255	8
104 Trenton	3	108	108	111	167	114	5	90	....	....	146	....

AND HIGH SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of Pupils in the various subjects—Continued											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
53	102	102	96	157	1	56	....	....	....	116	157	....	101	....	....	15
54	147	147	113	197	....	147	....	....	....	125	202	....	108	....	....	....
55	75	75	53	133	1	94	33	21	21	77	155	21	....	....	....	1
56	63	63	43	17	4	66	....	....	....	66	86	....	....	....	....	....
57	.....	72	62	97	....	33	....	....	....	72	102	....	....	....	....	5
58	38	38	34	34	....	38	....	....	....	38	53	....	....	....	....	....
59	79	79	75	112	13	67	....	....	....	67	117	....	....	....	....	....
60	75	75	53	87	6	95	92	26	26	70	119	26	....	....	....	....
61	92	92	70	123	3	55	....	....	....	89	128	....	....	....	....	....
62	83	83	56	111	....	83	....	....	....	83	111	....	....	....	....	....
63	67	67	56	95	....	69	....	....	....	72	95	....	....	....	....	5
64	30	30	34	40	....	30	....	....	....	30	42	....	....	....	....	....
65	81	81	65	117	....	81	....	....	....	89	115	....	....	....	....	8
66	69	69	46	82	....	36	....	....	....	69	82	....	....	....	....	4
67	14	14	10	18	....	14	....	....	....	14	18	....	....	....	....	....
68	88	88	82	140	2	128	84	56	57	45	203	56	....	....	....	2
69	24	24	12	25	....	22	10	9	11	13	27	....	....	....	....	....
70	62	62	45	79	4	56	28	29	29	86	111	29	42	....	38	....
71	64	64	47	47	....	64	....	....	....	63	80	....	....	....	....	....
72	34	34	74	20	....	99	15	17	17	38	128	17	32	....	....	....
73	.....	.....	11	11	....	30	....	....	....	30	41	....	....	....	....	....
74	87	86	77	121	3	104	73	20	20	83	147	20	....	....	....	5
75	84	84	84	140	5	138	59	59	59	82	210	59	....	....	....	....
76	80	80	13	21	....	52	57	27	18	80	103	....	....	....	....	....
77	96	96	74	128	....	45	....	....	....	98	128	....	....	....	....	....
78	67	67	35	84	....	35	....	....	....	62	84	....	....	....	....	....
79	97	97	55	57	....	80	55	26	26	31	179	26	....	....	....	....
80	48	48	25	62	....	48	48	15	15	48	62	15	....	....	....	....
81	102	102	31	34	....	102	....	....	....	102	136	....	....	....	....	....
82	45	45	53	53	....	45	....	....	....	45	53	....	....	....	....	....
83	47	47	29	59	....	47	....	....	....	47	57	....	....	....	....	....
84	.....	.....	45	73	....	28	....	....	5	53	73	....	....	....	....	....
85	1	1	59	101	....	85	43	43	43	30	144	43	34	....	....	....
86	66	66	50	82	....	57	....	....	....	57	87	....	18	....	11	....
87	27	27	17	32	....	27	....	....	....	27	32	....	....	....	....	....
88	80	80	54	109	....	47	22	....	....	71	110	....	....	....	....	....
89	51	51	56	73	....	56	....	....	....	51	72	....	....	....	....	....
90	114	114	85	144	....	113	51	....	....	113	147	....	....	....	....	1
91	23	23	8	31	....	23	....	....	....	23	31	....	....	....	....	....
92	58	58	121	230	....	165	51	51	51	55	289	....	....	92	138	10
93	50	50	43	74	....	.....	20	....	....	50	76	....	....	....	....	....
94	52	52	120	120	2	81	36	....	....	87	145	....	....	....	....	8
95	38	38	41	59	....	18	....	....	....	26	59	....	....	....	....	....
96	50	50	46	76	....	50	....	....	....	50	76	....	....	....	....	....
97	29	29	12	41	....	41	9	3	7	29	40	....	....	....	....	....
98	130	130	47	49	....	53	53	53	53	59	201	53	....	....	....	....
99	84	84	69	121	....	84	....	....	....	84	121	....	....	....	....	....
100	31	31	31	58	....	43	18	....	15	43	58	....	....	....	....	....
101	93	93	67	66	3	90	90	....	1	91	121	....	....	....	....	....
102	800	800	73	873	....	931	957	957	445	62	957	957	....	....	....	15
103	138	138	143	145	....	105	95	....	....	130	256	....	....	....	....	....
104	33	33	110	166	....	108	....	....	....	36	167	....	....	....	....	....

COLLEGIATE INSTITUTES AND

III.—TABLE M.—ATTENDANCE, PUPILS IN THE SCHOOLS

High Schools—Concluded	Pupils					Number of Pupils in—				Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary School	Boys on the roll for the year	Girls on the roll for the year	Average daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial District	Other Counties or Districts
						F. I	F. II					
105 Tweed	77	22	22	55	62	24	35	14	4	40	37	.....
106 Uxbridge ...	134	42	54	80	109	58	34	30	12	51	77	6
107 Vienna	27	12	13	14	22	12	10	5	.....	24	.....	3
108 Walkerton..	97	37	43	54	79	48	24	20	5	54	42	1
109 Wallaceburg	120	45	46	74	97	55	38	20	7	85	26	9
110 Wardsville..	38	14	19	19	28	15	15	8	.....	15	15	8
111 Waterdown .	71	28	24	47	54	30	24	17	.....	54	7	10
112 Waterford ..	62	25	21	41	49	30	20	12	.....	62	.....	.....
113 Watford....	107	36	40	67	85	37	33	29	8	37	62	8
114 Welland	219	68	108	111	170	102	67	40	10	108	111	.....
115 Weston.....	168	53	81	87	127	65	57	46	.....	70	92	6
116 Whitby	130	59	56	74	94	67	32	26	5	64	64	2
117 Wiarton	95	20	41	54	73	26	27	37	5	49	24	22
118 Williamstown	92	27	42	50	80	32	45	15	.....	89	3	.....
119 Winchester .	138	28	62	76	111	49	49	31	9	68	60	10
120 Wingham...	137	41	53	84	107	45	37	45	10	69	59	9
1 Totals, High Schools	14,047	4,924	5,791	8,256	11,099	5,829	4,391	3,302	525	8,333	5,014	700
2 Totals, Collegiate Institutes	18,989	6,731	8,890	10,099	15,717	7,664	5,460	4,868	997	14,909	3,512	568
3 Grand Totals, 1919–1920 ..	33,036	11,655	14,681	18,355	26,816	13,493	9,851	8,170	1,522	23,242	8,526	1,268
4 Grand Totals, 1918–1919 ..	30,732	11,448	13,228	17,504	24,500	12,792	8,933	7,519	1,488	21,458	7,997	1,277
5 Increases.....	2,304	207	1,453	851	2,316	701	918	651	34	1,784	529	.....
6 Decreases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
7 Percentages ..	.....	35.27	44.43	55.56	81.17	40.84	29.81	24.73	4.60	70.35	25.80	3.83

HIGH SCHOOLS—Continued

AND IN THE VARIOUS SUBJECTS, ETC.—Continued

	Number of pupils from families whose head is occupied as below—								Number of Pupils in the Various Subjects						
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediæval History
105	11	27	2	1	17	9	8	2	59	77	77	73	73	14	4
106	35	78	4	2	3	5	.....	7	92	123	123	88	64	30	1
107	3	18	.....	1	5	.....	.....	.....	22	27	27	27	15	5	.....
108	24	39	6	2	13	8	.....	5	72	92	92	92	92	20	.....
109	22	37	7	3	28	16	6	1	113	120	120	75	58	20	7
110	6	23	4	....	2	1	1	1	30	38	38	38	23	8	.....
111	9	46	3	1	7	1	4	.....	54	71	71	71	41	17	.....
112	7	35	6	....	1	8	5	.....	50	62	62	58	28	12	.....
113	13	76	6	....	11	1	.....	.....	70	101	101	99	62	29	5
114	53	67	12	4	71	8	2	2	169	215	215	209	209	40	6
115	24	54	6	....	34	6	19	25	67	168	168	87	81	46	.....
116	15	59	14	1	11	12	14	4	79	116	124	116	54	24	4
117	14	35	2	1	6	11	12	14	53	94	94	89	63	36	5
118	10	68	4	....	3	2	3	2	77	92	92	51	60	15	.....
119	20	90	1	....	12	5	7	3	98	129	129	129	80	31	.....
120	12	66	11	....	17	9	19	3	82	136	136	82	127	45	9
1	2,401	5,370	668	146	2,517	1,145	1,281	519	9,733	13,746	13,799	11,767	9,619	3,127	256
2	5,316	3,318	901	333	4,295	1,361	2,609	856	11,995	18,464	18,503	14,357	12,755	4,466	412
3	7,717	8,688	1,569	479	6,812	2,506	3,890	1,375	21,728	32,210	32,302	26,124	22,374	7,593	668
4	7,194	8,367	1,629	535	6,237	2,107	3,424	1,239	20,655	29,902	29,914	25,160	21,093	6,753	650
5	523	321	.....	....	575	399	466	136	1,073	2,308	2,388	964	1,281	840	18
6	.....	.....	60	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	23.36	26.29	4.75	1.45	20.62	7.58	11.77	4.16	65.77	97.49	97.77	79.07	67.72	22.98	2.02

COLLEGIATE INSTITUTES AND

III.—TABLE M—ATTENDANCE, PUPILS IN THE SCHOOLS

Number of Pupils in the Various Subjects—Concluded

High Schools—Concluded	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
105 Tweed	....	59	59	59	77	53	4	61	....	.....	57	....
106 Uxbridge	6	92	92	92	126	68	4	131	....	7	128	....
107 Vienna	....	22	22	22	22	15	.....	21	....	.....	22	....
108 Walkerton	5	72	72	72	92	44	.....	37	....	3	52	....
109 Wallaceburg	....	93	93	93	120	65	7	85	....	3	94	....
110 Wardsville	....	30	30	30	38	23	.....	15	....	.....	22	....
111 Waterdown	....	54	54	54	71	41	.....	68	....	.....	65	....
112 Waterford	....	50	50	50	62	32	.....	61	....	.....	48	....
113 Watford	3	70	70	70	102	101	5	82	....	.....	78	....
114 Welland	4	169	169	169	181	103	4	146	....	1	170	....
115 Weston	....	67	67	124	168	102	.....	156	....	4	159	1
116 Whitby	3	78	99	93	106	56	4	101	....	.....	71	....
117 Wiarton	....	53	53	54	94	67	4	55	....	.....	58	....
118 Williamstown	....	77	77	77	92	60	.....	89	....	.....	89	....
119 Winchester	9	98	98	98	129	80	.....	89	....	4	84	....
120 Wingham	2	82	82	83	136	91	9	115	....	4	113	5
1 Totals, High Schools	175	10,161	9,431	10,237	13,267	7,779	356	11,093	19	259	10,154	50
2 Totals, Collegiate Institutes	346	12,628	10,387	12,751	17,518	10,647	701	15,220	105	1,444	14,266	297
3 Grand Totals, 1919–1920	521	22,789	19,818	22,988	30,785	18,426	1,057	26,313	124	1,703	24,420	347
4 Grand Totals, 1918–1919	532	21,240	18,777	21,274	28,847	16,703	1,136	23,932	25	1,638	22,602	412
5 Increases	....	1,549	1,041	1,714	1,958	1,723	.....	2,381	99	65	1,818	....
6 Decreases	11	.....	.....	.....	.....	.....	79	.....	....	.....	.....	65
7 Percentages	1.57	68.98	59 98	69.58	93.18	55.77	3.19	79.64	.37	5.15	73.91	1.05

HIGH SCHOOLS---Concluded

AND IN THE VARIOUS SUBJECTS, ETC.—Concluded

	Number of Pupils in the Various Subjects—Concluded											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
105	59	59	73	77	...	24	.....	.....	.....	59	77	.....	.....	.....	.....	....
106	98	98	64	126	...	92	.....	.....	.....	92	132	.....	.....	.....	.....	....
107	22	22	15	27	...	22	.....	.....	.....	22	27	.....	.....	.....	.....	....
108	77	77	48	92	4	48	13	.....	.....	42	96	.....	.....	.....	.....	....
109	93	93	58	120	...	93	6	6	6	93	120	.....	.....	.....	.....	....
110	30	30	23	23	...	30	.....	.....	.....	30	38	.....	.....	.....	.....	....
111	54	54	41	71	...	54	.....	.....	.....	54	71	.....	.....	.....	.....	....
112	49	49	32	62	...	50	6	.....	.....	43	62	.....	.....	.....	.....	....
113	73	73	65	104	3	70	.....	.....	.....	70	107	.....	.....	.....	.....	....
114	138	138	101	214	3	111	39	34	34	135	218	34	.....	.....	.....	3
115	67	67	102	167	...	67	61	.....	27	67	167	.....	38	.....	.....	....
116	53	53	19	92	...	99	29	21	21	39	130	22	41	.....	.....	....
117	53	53	63	94	...	53	.....	.....	.....	53	94	.....	.....	.....	.....	15
118	77	77	15	15	...	77	.....	.....	.....	77	90	.....	32	.....	.....	....
119	107	107	89	129	5	98	.....	.....	.....	98	135	.....	107	.....	.....	....
120	79	78	84	136	2	82	.....	.....	.....	83	137	.....	44	.....	.....	....
1	8,599	8,734	7,142	11,909	147	8,689	2,719	1,664	1,271	7,926	13,976	1,506	889	92	359	118
2	7,385	7,381	7,556	13,543	160	8,458	3,995	2,575	2,173	7,196	18,592	2,459	516	2,347	3,129	385
3	15,984	16,115	14,698	25,452	307	17,147	6,714	4,239	3,444	15,122	32,568	3,965	1,405	2,439	3,488	503
4	15,497	15,524	14,473	24,419	432	16,090	6,495	3,825	3,010	14,652	30,300	3,779	1,145	3,253	3,131	617
5	487	591	225	1,033	...	1,057	219	414	434	470	2,268	186	260	.....	357	....
6	.....	.....	.....	.....	125	.....	.....	.....	.....	.....	.....	.....	.....	814	.....	114
7	48.38	48.78	44.49	77.04	.92	51.90	20.32	12.83	10.42	45.77	98.58	12.00	4.25	7.38	10.55	1.52

INDUSTRIAL, TECHNICAL

DAY

I. TABLE N.—Attendance, Number of Pupils in the Various

Day Schools	Number of Teachers	Attendance						
		Total number of pupils on the roll for the year	New pupils admitted during the year	Pupils admitted for the first time to a secondary school during the year	Boys on the roll	Girls on the roll	Days the school was open	Average daily attendance for the year
1 Brantford Industrial School	7	13	11	11	13	.....	200	8
2 Chatham Industrial School	5	31	13	9	23	8	197	17
3 Collingwood School of Navigation	2	43	43	43	43	.....	120	25
4 Haileybury, Mining Dep't. of High School	8	60	39	19	60	.....	190	38
5 Hamilton Technical and Art School	25	634	241	64	484	150	196	371
6 Kingston, School of Navigation	3	27	27	27	27	.....	65	15
7 London Industrial and Art School	11	192	136	101	128	64	186	106
8 Ottawa Technical School	21	589	164	288	145	444	198	116
9 Sault Ste. Marie, Technical Deparment of High School	9	20	15	13	20	.....	181	14
10 Sudbury, Mining Dep't. of High School	2	31	10	10	31	.....	179	25
11 Toronto, Technical and Art School	82	3,094	732	614	1,922	1,172	187	2,000
12 Windsor Industrial School	2	56	38	35	40	16	180	36
Totals 1919-20	177	4,790	1,469	1,234	2,936	1,854	.....	2,771

Number of Pupils in the Various

Day Schools—Continued	Algebra	Geometry	Trigonometry	Shop Mathematics	Surveying and Maping	General Physics	Electricity	Applied Mechanics
1 Brantford Industrial School	13	13	....	13	....	13	13	13
2 Chatham Industrial School	31	23	6	23	....	23	.....	.....
3 Collingwood School of Navigation	.....	43	43	....	....	.....	.....	.....
4 Haileybury, Mining Dep't. of High School	30	16	19	16	34	38	.....	.....
5 Hamilton Technical and Art School	140	140	....	....	....	327	109	.....
6 Kingston, School of Navigation	.....	.....	....	....	....	.....	.....	.....
7 London Industrial and Art School	94	116	....	103	....	136	.....	.....
8 Ottawa Technical School	47	128	....	....	....	198	44	.....
9 Sault Ste. Marie, Technical Department of High School	20	20	....	20	....	20	20	20
10 Sudbury, Mining Dep't. of High School	31	21	21	....	21	21	26	10
11 Toronto, Technical and Art School	1,019	1,019	376	701	....	1,143	409	78
12 Windsor Industrial School	40	.....	20	....	....	32	.....	.....
Totals 1919-20	1,465	1,539	485	876	55	1,951	621	121

AND ART SCHOOLS

SCHOOLS

Branches of Instruction, and Value of Equipment

	Number of Pupils from families whose head is occupied as below—																
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Literature	Reading	Composition and Spelling	Grammar	History and Civics	Geography	Bookkeeping for Industrial purposes	Arithmetic
1	....	2	....	....	8	2	1	....	13	13	13	13	13	13	.....	13
2	5	6	....	....	7	10	2	1	31	31	31	8	31	31	31	8
3	....	....	....	....	....	....	43	....	.....	.....	43	.....	.....	.....	.....	43
4	3	1	....	....	24	1	2	2	29	13	29	13	24	24	.....	53
5	14	36	3	5	151	32	385	8	154	146	146	146	327	234	.....	234
6	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
7	42	25	6	2	67	9	20	21	166	166	166	160	166	140	45	186
8	32	8	3	4	56	34	61	....	198	198	198	198	198	198	.....	198
9	11	1	....	....	5	....	3	....	20	20	20	20	20	20	.....	20
10	8	....	....	2	13	2	6	....	31	10	31	21	26	10	.....	21
11	263	28	57	27	397	79	330	164	1,348	918	1,348	868	1,348	868	1,134	1,134
12	10	....	....	....	26	20	....	....	56	32	56	56	56	56	.....	56
	388	107	69	40	754	189	853	196	2,046	1,547	2,081	1,503	2,209	1,594	1,210	1,966

Branches of Instruction, Etc.—Continued

	General Chemistry	Chemistry of the Trades and Industries	Metallurgy and Assaying	Mineralogy and Geology	Mechanical Drawing	Machine Drawing and Design	Architectural Drawing	Sheet Metal Drawing	Machine Shop Work	Forge Work	Foundry Work	General Wood Working	Joinery and Cabinet Making	Pattern Making	Carpentry and Building Construction	Painting and Decorating	Plumbing	Steam and Gas Engines and Power Plants
1	13	....	....	....	13	13	....	....	13	13	....	13	13	13	....	....	....	....
2	8	....	....	....	23	....	....	....	13	....	....	10	....	....	....	....	....	....
3	.....	....	....	....	.....	15	....	....	....	....	....	.....	....	....	....	....	....	....
4	56	....	45	60	45	....	....	....	....	....	....	.....	....	....	....	....	....	....
5	52	52	....	....	427	....	12	....	183	....	....	43	57	40	....	....	....	....
6	.....	....	....	....	.....	....	....	....	....	....	....	.....	....	....	....	....	....	....
7	95	....	....	....	122	122	....	....	122	....	....	105	....	20	20	....	....	....
8	.....	....	....	....	126	....	126	....	....	....	....	119	119	....	49	....	....	....
9	5	5	....	....	20	20	....	....	20	2	....	15	....	....	....	....	....	....
10	31	....	10	31	21	26	....	....	....	....	....	.....	....	....	....	....	....	....
11	1,341	75	22	22	869	65	61	256	293	285	285	722	23	195	38	10	13	48
12	24	20	....	....	40	....	....	....	40	40	....	40	....	....	....	....	....	....
	1,625	152	77	113	1,706	261	199	256	684	340	285	1,067	212	268	107	10	13	48

INDUSTRIAL, TECHNICAL

DAY

I. TABLE N.—Attendance, number of Pupils in the Various

Day Schools—Continued	Electrical Machinery and Wiring	Printing and Book-binding	Automobile Mechanics	Navigation and Seamanship	Marine Engineering	Elementary Drawing	Colour Study	Lettering	Industrial Design	Illustrating
1 Brantford Industrial School	.....	.....	....	....	....	13	....	....	.....	.....
2 Chatham Industrial School	.....	.....	....	....	....	8	....	....	.....	.....
3 Collingwood School of Navigation	.....	.....	....	28	15	43	....	....	.....	.....
4 Haileybury Mining Dept.of High Sch.	.....	.....	....	....	....	....	....	....	.....	.....
5 Hamilton Technical and Art School	.....	61	....	....	....	70	....	1	11	.....
6 Kingston, School of Navigation	.....	.....	....	17	....	....	....	....	.....	.....
7 London Industrial and Art School.	65	.....	....	....	....	....	....	....	.....	.....
8 Ottawa Technical School	44	.....	112	....	....	70	70	70	.....	.....
9 Sault Ste. Marie, Technical Department of High School	.....	.....	....	....	....	....	....	20	.....	.....
10 Sudbury, Mining Dept. of High Sch.	.....	.....	....	....	....	....	....	....	.....	.....
11 Toronto, Technical and Art School	65	235	130	....	....	184	154	154	270	154
12 Windsor Industrial School	.....	.....	....	....	....	....	....	....	.....	.....
Totals 1919-20	174	296	242	45	15	388	224	245	281	154

Attendance, number of Pupils in the

Day Schools—Concluded	Physical Culture	Motion Picture Operating	Bookkeeping, Shorthand, Typewriting	Telegraphy	Shoe Repairing	Value of Library	Value of Maps and Charts	Value of Laboratory and Workshop Tables
						$	$	$
1 Brantford Industrial School	13	.....	.....	.....	.....	50	25	886
2 Chatham Industrial School	31	.....	.....	.....	.....	198	12	341
3 Collingwood School of Navigation	.....	.....	.....	.....	.....	243	.....	250
4 Haileybury, Mining Dpt.of High Sch.	29	.....	.....	.....	.....	154	125	1,984
5 Hamilton Technical and Art School.	40	.....	.....	.....	.....	423	71	3,497
6 Kingston, School of Navigation	.....	.....	.....	.....	.....	.....	.....	.....
7 London Industrial and Art School	192	.....	.....	.....	.....	.....	.....	.....
8 Ottawa Technical School	198	.....	.....	.....	.....	153	10	2,822
9 Sault Ste. Marie Technical Department of High School	20	.....	.....	.....	.....	.....	.....	.....
10 Sudbury, Mining Dept. of High School	31	.....	.....	.....	.....	253	.....	235
11 Toronto Technical and Art School	1,345	12	248	77	147	3,603	120	43,943
12 Windsor Industrial School	56	.....	.....	.....	.....	71	.....	350
Totals 1919-20	1,955	12	248	77	147	5,148	363	54,308

AND ART SCHOOLS—Continued

SCHOOLS—Continued

Branches of Instruction and Value of Equipment—Continued

	Drawing and Painting from Antique	Drawing and Painting from Still Life	Drawing and Painting from Life	Modelling	Pottery	History of Art	Cooking	Housekeeping	Home Economics	Home Nursing	Hygiene and Dietetics	Sewing and Dressmaking	Power Machine Operating	Laundry	Millinery	Embroidery and Lace Making	French	German	Latin
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
2	....	....	....	....	....	....	8	8	8	8	8	8	....	8	8	8	....	....	....
3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6	....	....
5	8	5	....	....	....	....	82	....	17	17	....	87	....	....	87	....	94	....	....
6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
7	....	....	....	....	....	....	64	....	....	....	61	64	....	45	64	45	42	....	42
8	....	....	....	....	....	....	70	70	70	70	70	70	....	70	70	....	....	....	....
9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	26	....	....
11	93	130	65	112	48	130	602	65	325	136	186	585	15	73	540	48	628	45	410
12	....	....	....	....	....	....	16	16	16	16	16	16	....	16	16	....	16	....	....
	101	135	65	112	48	130	842	159	436	247	341	830	15	212	785	101	812	45	452

Various Branches of Instruction and Value of Equipment.—Concluded

Equipment

	Machines and Tools	Scientific Apparatus	Drawing Instruments	Drawing Models	Stoves, Ranges and Utensils	Equipment for Dress-making	Equipment for Millinery	Equipment for Laundry	Equipment for Home Nursing	Equipment for Physical Culture	Other Equipment not specified	Total value of Equipment
	$	$	$	$	$	$	$	$	$	$	$	$
1	2,210	312	113	55	623	273	40	.....	73	.....	.....	4,660
2	4,184	426	7	7	1,739	250	34	.....	13	.....	1,863	9,074
3	.....	69	4	.....	85	.....	.....	.....	.....	.....	48	699
4	6,994	1,144	16	.....	.....	.....	.....	.....	.....	.....	.....	10,417
5	18,599	6,287	289	1,341	338	291	22	.....	35	55	3,499	34,747
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	19,546	5,142	35	14	235	9	.....	.....	.....	.....	48	28,014
9	.....	.....	36	.....	.....	.....	.....	.....	.....	.....	.....	36
10	2,237	286	22	.....	.....	.....	.....	.....	.....	.....	79	3,112
11	79,101	17,331	2,641	576	3,539	3,321	232	1,786	99	2,588	43,860	202,740
12	8,633	.....	.....	.....	91	80	.....	.....	.....	.....	758	9,983
	141,504	30,997	3,163	1,993	6,650	4,224	328	1,786	220	2,643	50,155	303,482

INDUSTRIAL, TECHNICAL

EVENING

II. Table O—Attendance, Pupils in the

Evening Schools	Number of Teachers	Attendance												
		Total number of pupils on the roll for the year	New pupils admitted during the year	Boys and men on roll	Girls and women on roll	Pupils whose birthplace is Canada	Pupils whose birthplace is the British Isles	Pupils who were born in other countries	Evenings the school was open	Textile Industries	Chemical Industries	Sheet Metal Work	Machine Shop Work
1 Almonte	6	60	60	24	36	49	10	1	40	..	...	...	....
2 Beamsville	4	59	59	23	36	54	5	.....	31	..	...	...	....
3 Belleville	16	288	288	119	169	231	53	4	48	..	...	...	11
4 Brantford	21	985	782	456	529	574	361	50	74	..	...	12	73
5 Brockville	17	302	217	159	143	246	48	8	48	..	...	4	32
6 Chatham	15	313	250	175	138	257	46	10	82	..	...	...	56
7 Cobourg	8	111	81	36	75	83	25	3	73	..	...	...	....
8 Collingwood	4	54	44	19	35	38	11	5	46	..	...	...	14
9 Coniston	1	10	6	10	.....	10	.....	.....	29	..	...	1	2
10 Cornwall	10	240	212	92	148	233	7	.....	32	..	...	5	5
11 Dundas	6	89	63	38	51	60	27	2	94	..	...	...	23
12 Fort William	19	339	241	198	141	159	154	26	98	..	2	6	23
13 Galt	10	293	217	146	147	159	124	10	155	..	...	2	71
14 Gananoque	6	53	35	19	34	46	6	1	48	..	...	...	....
15 Goderich	5	120	92	41	79	105	11	4	....	..	...	...	....
16 Guelph	19	587	265	203	184	274	102	11	48	..	...	2	27
17 Hamilton	61	2,864	454	1,850	1,014	1,239	1,297	328	122	..	4	...	378
18 Ingersoll	6	82	56	35	47	72	10	.....	48	..	...	...	28
19 Iroquois Falls	2	25	25	25	.....	16	7	2	30	..	...	1	3
20 Kitchener	17	508	425	147	361	434	38	36	117	..	6	2	18
21 Lindsay	14	380	380	193	187	347	26	7	92	..	...	...	42
22 London	39	1,404	1,222	766	638	932	411	61	89	..	...	19	127
23 Midland	2	20	20	20	.....	16	3	1	30	..	...	...	6
24 Newmarket	6	68	51	25	43	50	16	2	68	..	...	...	4
25 Niagara Falls	8	317	173	152	165	155	86	76	164	..	2	...	15
26 North Bay	5	112	98	31	81	81	18	13	48	..	...	...	14
27 Orillia	7	142	142	63	79	107	34	1	21	..	...	1	12
28 Oshawa	8	231	231	198	33	129	78	24	39	..	...	2	30
29 Ottawa	47	2,989	1,694	862	2,127	2,453	424	112	143	..	...	7	38
30 Owen Sound	35	667	448	279	388	474	186	7	81	..	...	...	35
31 Pembroke	12	133	98	49	84	118	13	2	80	..	...	1	11
32 Peterborough	12	323	183	188	135	209	70	44	94	..	...	3	25
33 Port Arthur	16	259	211	153	106	127	81	51	41	..	5	4	27
34 Port Hope	7	135	135	64	71	103	25	7	65	..	...	...	20
35 Renfrew	6	113	73	42	71	97	8	8	72	..	...	...	12
36 St. Catharines	10	354	233	175	179	165	162	27	163	..	...	...	39
37 St. Thomas	17	253	75	115	138	191	46	16	48	..	...	10	36
38 Sarnia	24	600	600	264	336	556	22	22	100	..	5	1	40
39 Sault Ste. Marie	19	254	125	179	75	150	53	51	73	..	...	...	....
40 Stratford	6	299	250	221	78	203	60	36	96	25	...	...	85
41 Sturgeon Falls	4	44	12	44	.....	33	7	4	30	..	32	...	2
42 Sudbury	7	138	138	84	54	78	34	26	30	..	...	...	8
43 Timmins	9	89	89	78	11	37	5	47	63	..	12	...	15
44 Toronto	175	7,890	4,378	4,266	3,624	4,578	2,838	474	119	..	102	51	528
45 Walkerville	35	428	428	375	53	291	122	15	38	..	...	...	276
46 Welland	7	135	114	76	59	59	60	16	37	..	5	9	44
47 Whitby	5	82	53	25	57	65	15	2	92	..	...	...	3
48 Windsor	35	1,249	1,141	774	475	844	264	141	103	..	11	22	232
49 Woodstock	15	237	205	131	106	174	56	7	62	..	...	2	8
Totals, 1919–20.	845	26,527	16,872	13,707	12,820	17,161	7,565	1,801	....	25	186	167	2498

AND ART SCHOOLS—Continued
SCHOOLS
various Branches of Instruction, etc.

Occupations of pupils on entering school

	Forge Work	Foundry Work	Leather Work	Cabinet Making and Joinery	Carpentry and Building Construction	Painting and Decorating	Plumbing	Power Plant Operating	Electrical Work	Printing or Bookbinding	Photography, etc.	Other Trades	Art and Design	Women at work in factories	Women at work in shops and stores	House Workers	Housekeepers	Stenographers and Bookkeepers	Railroad Men	Students and Teachers	Commerce	Other Occupations	Without Occupation
1	...	...	..	....	....	...	...	...	...	...	..	....	....	20	....	16	....	....	..	..	..	....	....
2	...	...	..	....	....	...	...	...	5	...	..	18	....	....	6	2	28	....	..	..	..	....	....
3	...	...	..	....	2	2	2	...	12	4	..	3	....	14	28	21	63	27	19	16	21	35	8
4	11	28	..	....	29	7	10	33	26	...	..	67	....	95	97	39	131	20	..	45	26	229	7
5	...	31	5	....	11	4	3	...	13	7	..	27	....	17	21	9	106	....	..	..	..	7	5
6	...	...	..	3	3	1	1	...	10	6	..	29	....	....	58	....	58	....	..	..	..	88	....
7	...	...	..	....	....	...	...	...	...	...	..	....	....	10	9	3	60	....	..	..	..	29	....
8	...	1	..	....	....	...	1	...	1	...	..	4	....	1	4	1	13	....	..	..	..	14	....
9	2	...	..	....	....	...	...	...	3	...	..	2	....	....	....	....	....	....	..	..	..	....	....
10	...	...	..	....	3	2	...	...	3	1	..	12	....	80	9	....	60	....	..	..	..	56	4
11	...	...	..	12	....	...	1	...	...	1	..	1	....	10	8	5	7	....	..	..	..	15	6
12	2	7	..	....	....	1	2	54	33	4	..	48	....	2	5	7	43	....	..	..	..	95	5
13	...	9	2	....	....	...	...	31	1	...	..	3	....	23	12	5	83	....	..	..	..	49	....
14	...	...	..	....	....	...	...	...	...	...	..	....	....	....	6	2	13	....	..	..	..	5	....
15	...	...	..	....	....	...	...	16	3	3	..	8	....	5	3	12	32	....	..	..	..	28	10
16	...	9	1	....	8	5	2	2	7	7	1	35	....	42	32	30	3	....	..	..	..	126	48
17	9	4	..	6	74	...	11	63	116	73	2	176	19	164	38	228	1	....	..	..	..	1330	19
18	...	...	..	....	....	...	...	...	...	...	..	7	....	11	4	....	6	....	..	..	..	26	....
19	...	...	..	....	6	...	...	...	12	...	..	3	....	....	....	....	....	....	..	..	..	....	....
20	...	4	4	4	3	...	1	2	14	1	1	58	4	123	22	12	60	....	..	..	..	134	35
21	...	...	..	15	4	...	...	...	...	...	..	25	....	....	108	30	42	....	..	..	..	25	16
22	127	127	24	28	34	17	36	...	25	32	..	356	2	122	40	50	150	....	..	..	..	222	120
23	...	2	..	....	....	...	...	2	...	...	..	....	....	....	....	....	....	....	..	..	..	10	....
24	...	...	6	3	....	...	...	1	...	...	..	4	....	5	1	7	25	....	..	..	..	12	....
25	...	7	..	1	21	...	5	16	16	2	..	67	....	52	19	4	61	....	..	..	..	17	12
26	...	...	..	....	....	...	...	...	...	...	..	17	....	....	20	4	42	....	..	..	..	14	1
27	...	2	..	14	2	2	1	...	...	2	..	6	....	20	18	5	26	....	..	..	..	24	7
28	10	10	3	11	18	1	3	...	10	...	..	92	....	....	12	1	16	....	..	..	..	3	....
29	7	...	1	3	14	31	62	59	17	47	1	117	....	48	322	187	582	....	..	..	..	1195	251
30	1	...	..	44	1	2	1	17	3	...	..	129	....	37	59	25	167	....	..	..	..	128	19
31	...	1	..	....	10	...	2	...	3	...	1	3	....	5	3	19	40	....	..	..	..	20	14
32	...	...	1	1	6	...	3	10	42	...	1	42	1	26	23	....	28	....	..	11	..	95	5
33	4	1	..	....	5	1	11	3	12	3	..	14	....	....	37	10	30	....	..	..	..	83	9
34	4	10	..	....	3	...	1	2	...	...	..	24	....	2	14	5	36	....	..	..	..	5	9
35	5	2	..	2	3	2	...	2	6	...	..	....	....	10	12	8	14	....	..	..	..	18	17
36	...	9	1	....	9	1	...	13	14	...	1	82	....	29	4	12	100	....	..	..	..	38	2
37	19	15	5	5	8	3	2	...	10	...	..	23	10	29	60	8	10	....	..	..	..	....	....
38	1	30	..	....	8	2	3	1	10	...	1	130	....	10	15	4	103	....	..	..	..	154	82
39	...	...	..	....	1	...	...	...	7	...	..	5	....	....	9	1	54	....	..	..	..	177	....
40	...	...	..	14	5	12	...	4	2	...	..	16	....	....	18	33	....	....	..	..	..	53	33
41	...	...	..	....	1	...	...	...	1	...	..	....	....	....	....	....	....	....	..	..	..	8	....
42	2	2	..	....	5	...	2	29	15	...	1	20	....	....	26	5	14	....	..	..	..	3	6
43	...	...	..	....	2	...	...	...	3	...	..	46	....	....	....	....	11	....	..	..	..	....	....
44	18	15	13	42	171	42	199	88	342	163	19	384	75	496	306	142	457	....	..	..	..	3728	509
45	...	...	..	....	7	...	...	...	...	...	..	28	....	....	21	....	39	....	..	..	..	57	....
46	1	1	..	....	5	...	...	...	2	...	..	....	3	33	3	13	8	....	..	..	..	8	....
47	...	...	..	....	2	...	...	...	...	1	..	19	....	3	4	....	34	....	..	..	..	15	1
48	6	15	1	9	50	17	35	11	55	20	3	100	4	35	119	13	165	....	..	..	..	266	60
49	...	1	..	3	3	2	3	...	4	...	1	15	....	17	30	4	25	....	..	..	..	99	20
	229	343	67	220	537	157	403	459	858	377	33	2265	118	1596	1665	982	3046	47	19	72	47	8743	1340

INDUSTRIAL, TECHNICAL
EVENING
II. Table O—Attendance, Pupils in the

Number of pupils in the various branches of instruction

Evening Schools—Continued	English Literature	Reading	Composition and Spelling	Grammar	History and Civics	Geography	Bookkeeping for Industrial Purposes	Arithmetic	Algebra	Geometry	Trigonometry	Shop Mathematics	Surveying and mapping
1 Almonte	.....	21	21	.....	....	....	....	21	.....	....	....	.....	...
2 Beamsville	.....	.....	8	.....	....	....	26	8	.....	....	....	.....	...
3 Belleville	30	30	30	30	....	....	29	18	12	12	12	.....	...
4 Brantford	88	78	78	.....	....	....	51	78	31	....	....	38	...
5 Brockville	.....	.....	32	32	....	....	....	53	....	....	....	4	...
6 Chatham	53	53	53	53	....	....	30	.....	.....	....	....	.....	...
7 Cobourg	.....	.....	.....	.....	....	....	....	.....	.....	....	....	.....	...
8 Collingwood	.....	.....	.....	.....	....	....	....	.....	.....	....	....	22	...
9 Coniston	.....	.....	.....	.....	....	....	....	.....	.....	....	....	9	...
10 Cornwall	.....	124	124	124	....	....	....	124	.....	....	....	.....	...
11 Dundas	17	.....	17	17	....	....	....	17	15	15	....	15	...
12 Fort William	15	41	41	41	54	41	....	39	14	....	15	29	...
13 Galt	.....	.....	.....	.....	....	....	....	.....	8	....	5	29	...
14 Gananoque	9	.....	9	.....	....	....	....	14	2	....	....	2	...
15 Goderich	.....	.....	.....	.....	....	....	7	11	.....	....	....	24	...
16 Guelph	.....	.....	41	41	....	....	41	....	.....	....	....	.....	...
17 Hamilton	.....	451	451	451	....	....	....	451	.....	....	....	235	...
18 Ingersoll	.....	.....	.....	.....	....	....	....	.....	.....	....	....	23	...
19 Iroquois Falls	.....	.....	.....	.....	....	....	....	24	.....	....	....	.....	...
20 Kitchener	.....	.....	.....	.....	....	....	15	22	.....	....	....	14	...
21 Lindsay	.....	.....	25	.....	....	....	32	18	.....	....	....	28	...
22 London	388	388	388	388	388	388	388	388	388	388	388	61	...
23 Midland	.....	.....	.....	.....	....	....	....	.....	.....	....	....	.....	...
24 Newmarket	14	14	14	.....	....	....	....	14	.....	....	....	.....	...
25 Niagara Falls	.....	.....	33	.....	....	....	31	22	.....	....	....	.....	...
26 North Bay	25	8	25	.....	....	....	....	25	.....	....	....	14	...
27 Orillia	.....	.....	.....	.....	....	....	....	.....	.....	....	....	16	...
28 Oshawa	30	30	30	30	30	....	....	30	.....	....	....	21	...
29 Ottawa	299	299	299	299	21	21	47	299	.....	....	....	57	...
30 Owen Sound	.....	.....	136	.....	....	....	....	136	1	2	1	12	...
31 Pembroke	31	31	31	.....	....	....	14	3	.....	....	....	11	...
32 Peterborough	.....	.....	.....	.....	....	....	....	.....	12	....	5	19	...
33 Port Arthur	29	29	29	29	....	....	10	25	.....	....	....	6	...
34 Port Hope	.....	.....	.....	.....	....	....	....	.....	.....	....	....	42	...
35 Renfrew	.....	.....	.....	.....	....	....	....	.....	.....	....	....	.....	...
36 St. Catharines	14	.....	14	.....	....	....	33	37	.....	....	....	25	...
37 St. Thomas	19	19	19	19	....	....	11	19	.....	....	....	19	...
38 Sarnia	58	58	58	.....	....	....	....	68	15	15	15	64	...
39 Sault Ste. Marie	.....	.....	15	.....	....	15	....	25	.....	....	....	.....	...
40 Stratford	.....	.....	16	.....	....	....	....	68	15	....	....	68	...
41 Sturgeon Falls	.....	10	.....	.....	....	....	....	18	.....	....	....	8	...
42 Sudbury	.....	21	3	3	....	....	10	23	.....	....	....	.....	...
43 Timmins	.....	.....	.....	.....	....	....	....	14	14	14	....	14	...
44 Toronto	769	769	769	769	....	....	....	1,520	932	504	84	932	14
45 Walkerville	.....	.....	.....	.....	....	....	....	24	.....	....	....	19	...
46 Welland	.....	.....	30	.....	....	....	....	30	.....	....	....	23	...
47 Whitby	.....	.....	.....	.....	....	....	13	.....	.....	....	....	.....	...
48 Windsor	.....	56	107	.....	....	....	....	107	.....	....	....	25	...
49 Woodstock	.....	.....	.....	.....	....	....	35	.....	.....	....	....	13	...
Totals 1919-20	1,888	2,530	2,946	2,326	493	465	823	3,793	1,459	950	525	1,941	14

AND ART SCHOOLS—Continued
SCHOOLS—Continued
various Branches of Instruction, etc.—Continued

Number of pupils in the various branches of instruction.

	General Physics	Electricity	Telegraphy	Applied Mechanics	General Chemistry	Chemistry of the Trades and Industries	Mineralogy and Geology	Mechanical Drawing	Machine Drawing and Design	Architectural Drawing	Sheet Metal Drawing	Machine Shop Work	Forge Work	Sheet Metal Work	General Woodworking	Cabinet Making and Joinery	Pattern Making	Carpentry and Building Construction
1	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
2	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
3	...	.....	6	....	....	....	....	16	....	....	....	....	....	....	....	.....	....	....
4	...	49	....	....	....	....	....	37	38	....	....	....	....	....	....	68	....	....
5	...	30	....	....	....	30	....	32	....	....	....	....	....	....	28	.....	....	....
6	...	13	29	....	....	....	....	29	....	....	....	31	....	....	44	.....	....	....
7	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
8	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
9	...	.....	....	....	....	....	....	7	....	....	....	....	....	....	....	.....	....	....
10	...	20	....	....	5	....	....	9	....	....	....	....	....	....	....	.....	....	....
11	...	.....	....	....	....	....	....	15	....	....	....	....	....	....	....	.....	....	....
12	...	26	....	....	15	....	....	13	13	....	....	....	....	....	....	23	....	....
13	...	22	....	....	....	....	....	37	....	....	....	....	....	....	....	19	....	....
14	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
15	16	6	....	....	16	....	....	.....	....	....	....	....	....	....	....	.....	....	....
16	...	28	21	....	....	....	....	24	24	....	....	17	....	....	41	41	....	....
17	...	223	58	....	32	....	....	184	....	45	....	162	....	....	....	113	19	59
18	...	.....	....	....	....	....	....	23	....	....	....	....	....	....	11	.....	....	....
19	...	.....	....	....	....	....	....	.....	10	....	....	....	....	....	....	.....	....	....
20	11	64	....	....	11	....	....	21	....	....	....	10	....	....	....	.....	....	....
21	...	.....	....	....	....	....	....	50	....	....	....	....	....	....	....	.....	....	....
22	...	67	....	....	....	20	....	167	167	38	8	165	165	....	107	42	....	14
23	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
24	...	.....	....	....	....	....	....	12	12	....	....	....	....	....	....	.....	....	....
25	...	48	....	....	....	....	....	46	....	12	....	....	....	....	....	.....	....	....
26	...	.....	....	....	....	....	....	14	....	....	....	....	....	....	....	.....	....	....
27	...	.....	....	....	....	....	....	23	24	....	....	....	....	....	....	.....	....	....
28	...	19	....	....	....	....	....	34	....	....	....	....	....	....	....	.....	....	....
29	...	46	....	....	42	....	....	58	6	40	2	....	....	....	122	.....	....	....
30	...	.....	....	....	....	....	....	22	23	....	....	....	....	....	35	.....	....	....
31	...	.....	....	....	....	....	....	9	....	3	....	....	....	....	....	.....	....	....
32	...	46	....	....	....	....	....	36	....	....	....	....	....	....	....	.....	....	....
33	...	16	....	....	....	....	....	9	....	13	....	....	....	....	19	.....	....	....
34	...	.....	....	....	....	....	....	22	....	....	....	....	....	....	....	.....	....	....
35	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
36	...	14	....	....	....	....	....	32	....	....	....	....	....	....	....	.....	....	....
37	...	11	....	....	....	....	....	25	....	....	....	....	....	....	....	.....	....	....
38	9	27	....	....	17	....	....	49	15	11	....	....	....	....	15	.....	....	....
39	...	7	....	65	....	....	....	10	....	....	....	....	....	....	....	.....	....	....
40	69	69	....	....	18	....	....	50	....	....	....	....	....	....	....	.....	....	....
41	...	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
42	...	24	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
43	11	.....	....	....	11	....	....	.....	14	....	....	....	....	....	....	.....	....	....
44	70	560	....	36	106	124	23	455	380	128	30	197	58	....	58	23	13	73
45	...	13	....	....	....	....	....	68	....	40	....	211	....	....	....	.....	....	....
46	...	18	....	....	4	....	....	23	....	....	....	....	....	....	....	.....	....	....
47	...	22	....	....	....	....	....	.....	....	....	....	....	....	....	....	.....	....	....
48	...	64	....	....	....	....	....	48	....	30	....	67	....	16	....	45	....	....
49	...	.....	....	....	....	....	....	5	....	....	....	60	60	....	....	20	....	....
		186	1,552	114	101	277	174	23	1,714	726	360	40	920	283	16	500	394	32	146

INDUSTRIAL, TECHNICAL
EVENING
II. Table O—Attendance, Pupils in the various

Evening Schools—Concluded	Number of pupils in the various branches of instruction															
	Painting and Decorating	Plumbing	Steam and Gas Engines and Power Plants	Clay working	Printing and Book-binding	Photography, Photo-engraving and Litho-graphy	Automobile Mechanics	Elementary Drawing	Colour Study	Lettering	Show Card Writing	Industrial Design	Illustrating	Drawing and Painting from Antique	Drawing and Painting from Still Life	Drawing and Painting from Life
1 Almonte	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
2 Beamsville	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
3 Belleville	...	....	.....	...	....	.....	.....	...	...	24	24	24	....	....	....	....
4 Brantford	...	....	52	...	....	.....	188	25	25	...	....	....	....	....	....	....
5 Brockville	...	....	.....	...	....	.....	.....	5	5	3	4	2	....	4	3	6
6 Chatham	...	....	.....	...	....	.....	54	...	...	...	....	....	....	....	....	....
7 Cobourg	...	....	.....	...	....	.....	26	...	...	...	....	....	....	....	....	....
8 Collingwood	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
9 Coniston	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
10 Cornwall	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
11 Dundas	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
12 Fort William	...	....	.....	...	....	.....	54	...	...	...	....	....	....	....	....	....
13 Galt	...	....	30	...	....	.....	.....	...	...	...	....	....	....	....	....	....
14 Gananoque	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
15 Goderich	...	....	16	...	....	.....	.....	...	...	...	....	....	....	....	....	....
16 Guelph	...	....	.....	...	....	.....	.....	...	...	...	28	....	....	....	....	....
17 Hamilton	...	....	.....	...	....	.....	99	4	...	20	20	....	....	32	6	....
18 Ingersoll	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
19 Iroquois Falls	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
20 Kitchener	...	....	.....	10	....	.....	.....	...	...	...	....	....	....	....	....	....
21 Lindsay	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
22 London	...	42	23	...	....	.....	255	...	...	...	76	51	51	51	51	51
23 Midland	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
24 Newmarket	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
25 Niagara Falls	...	....	29	...	....	.....	.....	...	...	...	....	....	....	....	....	....
26 North Bay	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
27 Orillia	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
28 Oshawa	...	....	.....	...	....	.....	91	...	...	...	....	....	....	....	....	....
29 Ottawa	...	59	54	...	....	.....	177	51	...	51	35	....	....	51	51	....
30 Owen Sound	...	....	.....	...	....	.....	57	...	...	...	....	....	....	....	....	....
31 Pembroke	...	....	.....	...	....	.....	45	...	...	...	....	....	....	....	....	....
32 Peterborough	...	....	.....	...	....	.....	27	...	...	...	18	....	....	....	....	....
33 Port Arthur	...	12	.....	...	....	.....	29	...	...	...	....	14	....	....	14	....
34 Port Hope	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
35 Renfrew	...	....	.....	...	....	.....	21	...	...	...	....	....	....	....	....	....
36 St. Catharines	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
37 St. Thomas	...	....	.....	...	....	.....	32	...	...	...	....	....	....	....	....	....
38 Sarnia	...	....	.....	...	....	.....	55	12	12	12	....	....	....	12	12	....
39 Sault Ste. Marie	...	....	47	...	....	.....	.....	...	...	...	....	....	....	....	....	....
40 Stratford	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
41 Sturgeon Falls	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
42 Sudbury	...	....	11	...	...	.....	.....	...	...	...	....	....	....	....	....	....
43 Timmins	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
44 Toronto	16	126	733	...	111	46	645	191	105	221	173	32	73	70	264	59
45 Walkerville	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
46 Welland	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
47 Whitby	...	....	.....	...	....	.....	.....	...	...	...	....	....	....	....	....	....
48 Windsor	...	30	26	...	....	.....	137	...	...	...	38	....	....	....	....	....
49 Woodstock	...	....	.....	...	....	.....	67	...	...	...	25	....	....	....	....	....
Totals, 1919-20	16	269	1,001	10	111	46	2,059	288	147	331	441	123	124	220	401	116

AND ART SCHOOLS—Continued

SCHOOLS—Continued

Branches of Instruction, etc.—Concluded

Number of pupils in the various branches of instruction

	Modelling	Pottery	Cooking	Housekeeping	Home Economics	Home Nursing	Hygiene and Dietetics	Sewing and Dress-making	Power Machine Operating	Millinery	Embroidery and Lace Making	Basketry	French	Spanish	Physical Culture	Shorthand and Typewriting	Engineering	Marine Engineering	Seamanship	Wood Carving	Salesmanship
1	...	....	13	...	...	....	...	19	....	.....	....	...	...	...	.....	....	...	...	...	...	...
2	...	....	14	...	...	....	...	11	....	.....	....	...	...	...	.....	...	...	...	...	...	...
3	...	....	16	...	16	....	...	.....	....	.....	....	...	...	...	.....	70	...	...	...	...	...
4	...	....	94	...	...	37	...	112	....	65	....	...	31	...	.....	....	...	...	...	...	...
5	...	....	41	...	...	....	...	65	....	64	....	...	...	...	40	....	...	...	...	...	...
6	...	....	38	...	...	13	22	28	....	18	....	...	...	...	.....	....	...	...	...	...	...
7	...	....	22	...	...	....	...	36	....	10	....	...	...	...	17	....	...	...	...	...	...
8	...	....	18	...	...	....	...	5	....	9	....	...	...	...	.....	....	...	...	...	...	...
9	...	....	.....	...	...	....	...	.....	....	.....	....	...	...	...	.....	....	...	...	...	...	...
10	...	....	.....	...	...	....	...	40	....	25	....	...	...	...	.....	....	...	...	...	...	...
11	...	....	13	...	...	....	...	21	....	.....	....	...	...	...	.....	....	...	...	...	...	...
12	...	....	11	...	...	....	...	62	....	25	....	...	12	...	.....	....	...	...	...	...	...
13	...	....	.....	...	...	....	9	135	....	.....	....	...	...	...	.....	....	...	...	...	...	...
14	...	....	.....	...	...	....	...	26	....	.....	....	...	...	...	.....	....	...	...	...	...	...
15	...	....	.....	...	...	....	...	30	....	46	....	...	...	...	.....	....	...	...	...	...	...
16	...	....	23	...	...	14	...	80	80	35	....	...	...	...	.....	....	...	...	...	16	...
17	9	....	45	...	...	....	...	479	....	263	....	...	36	...	.....	....	...	...	...	...	...
18	...	....	.....	...	...	....	...	10	....	9	....	...	...	...	.....	....	...	...	...	29	...
19	...	....	.....	...	...	....	...	.....	....	.....	....	...	...	...	.....	....	...	...	...	...	...
20	...	....	24	...	...	....	...	177	....	50	....	98	...	...	.....	22	9	...	...	...	...
21	...	....	.....	...	...	....	...	129	....	.....	....	...	...	...	.....	....	...	...	...	...	...
22	51	....	89	...	...	....	...	363	....	100	115	...	...	...	.....	....	...	...	...	86	...
23	...	....	.....	...	...	....	...	.....	....	.....	....	...	...	...	.....	....	20	...	...	...	...
24	...	....	.....	...	...	....	...	34	....	8	....	...	...	...	.....	....	...	...	...	...	...
25	...	....	54	...	...	....	...	75	....	25	....	...	...	...	.....	45	...	...	...	...	...
26	...	....	.....	...	...	13	...	60	....	.....	....	...	...	...	.....	....	...	...	...	...	...
27	...	....	.....	...	...	....	...	57	....	22	....	...	...	...	.....	....	...	...	...	...	...
28	...	....	.....	...	...	....	...	23	....	10	....	...	...	...	.....	....	...	...	...	...	...
29	...	....	696	...	...	89	...	638	....	382	....	...	...	...	97	....	...	...	...	...	...
30	...	....	84	...	...	....	...	103	....	152	57	...	...	...	12	....	...	17	26	...	...
31	...	....	.....	...	...	....	...	52	....	32	....	...	...	...	.....	....	...	...	...	...	...
32	...	....	51	...	...	....	...	69	....	9	....	...	...	...	.....	....	...	...	...	...	...
33	...	....	.....	...	...	....	10	21	....	17	....	...	...	...	.....	....	...	...	...	...	...
34	...	....	.....	...	...	....	...	71	....	.....	....	...	...	...	.....	....	...	...	...	...	...
35	...	....	.....	...	...	....	...	30	....	.....	28	...	...	...	34	....	...	...	...	...	...
36	...	....	.....	...	...	....	...	155	....	44	....	...	...	...	.....	....	...	...	...	...	...
37	...	....	27	...	...	....	...	64	....	20	....	...	...	...	.....	....	...	...	...	...	...
38	...	....	111	...	...	27	...	255	....	62	....	...	...	...	.....	....	...	...	...	...	...
39	...	....	.....	...	...	....	...	51	....	13	....	...	...	...	.....	....	...	...	...	...	...
40	...	....	.....	...	...	....	...	.....	....	.....	....	...	...	...	.....	....	...	...	...	...	...
41	...	....	.....	...	...	....	...	.....	....	.....	....	...	...	...	.....	....	...	...	...	...	...
42	...	....	.....	...	...	....	...	46	....	.....	....	...	...	...	.....	....	...	...	...	...	...
43	...	....	.....	...	...	....	...	9	....	.....	....	...	...	...	.....	....	...	...	...	...	...
44	40	55	1,170	...	62	227	45	1,029	53	688	64	...	435	78	690	....	...	...	...	...	...
45	...	....	.....	...	...	....	...	53	....	.....	....	...	...	...	.....	....	...	...	...	...	...
46	...	....	22	...	...	....	...	24	....	.....	....	...	...	...	.....	....	...	...	...	...	...
47	...	....	6	...	...	....	...	46	....	.....	....	...	...	...	.....	....	...	...	...	...	...
48	...	....	38	...	...	....	...	149	....	26	....	...	36	...	267	....	...	...	...	...	44
49	...	....	18	18	...	....	...	50	....	18	....	...	...	...	.....	....	...	...	...	...	...
	100	55	2,738	18	78	420	86	4,972	133	2,247	264	98	550	78	1,157	137	29	17	26	131	44

INDUSTRIAL, TECHNICAL

DAY AND

III. TABLE P—

Day and Evening Schools	Receipts				
	Legislative Grants	Local Municipal Grants	School Fees	Balances and other sources	Total Receipts
	$ c.	$ c.	$ c.	$ c.	$ c.
1*Almonte	389 77	.....	.....	.....	389 77
2 Arnprior	92 79	.....	21 00	42 72	156 51
3 Belleville	821 23	1,865 70	210 00	.....	2,896 93
4 Brantford	2,184 67	4,074 50	.....	36 67	6,295 84
5 Brockville	1,014 84	1,575 00	.....	200 55	2,790 39
6 Chatham	4,885 53	5,200 00	273 11	2,323 83	12,682 47
7 Cobourg	695 39	.....	76 00	284 84	1,056 23
8 Collingwood	492 18	1,003 55	46 00	.....	1,541 73
9 Coniston	123 57	.....	24 00	93 92	241 49
10 Dundas	787 84	267 30	160 00	13 41	1,228 55
11 Fort William	515 29	1,152 08	192 00	.....	1,859 37
12 Galt	992 45	459 57	939 00	.....	2,391 02
13 Gananoque	332 42	76 58	84 00	.....	493 00
14 Goderich	508 97	121 49	103 00	55 45	788 91
15 Guelph	1,291 76	2,068 70	250 00	.....	3,610 46
16 Haileybury	7,000 00	.....	.....	5,914 29	12,914 29
17 Hamilton	17,073 38	79,744 00	570 25	134,137 53	231,525 16
18 Ingersoll	553 77	200 00	159 50	1,130 53	2,043 80
19 Kingston	350 00	.....	.....	500 00	850 00
20 Kitchener	1,739 68	3,388 51	.....	.....	5,128 19
21 Lindsay	.....	250 00	738 00	50 00	1,038 00
22 London	30,899 82	41,735 94	3,377 02	15,630 53	91,643 31
23*Newmarket	495 44	132 20	34 00	32 34	693 98
24 Niagara Falls	1,348 76	757 00	283 00	124 76	2,513 52
25 North Bay	716 56	1,515 00	153 16	.....	2,384 72
26 Oshawa	.....	142 11	889 00	.....	1,031 11
27 Ottawa	16,484 85	2,875 29	5,649 94	103,517 73	128,527 81
28 Owen Sound	1,599 45	2,466 87	.....	20 93	4,087 25
29 Pembroke	866 27	783 68	.....	.....	1,649 95
30 Peterborough	971 11	2,000 00	98 89	925 06	3,995 06
31 Port Arthur	763 20	1,932 83	.....	.....	2,696 03
32 Renfrew	365 07	193 27	.....	.....	558 34
33 St. Catharines	467 74	.....	.....	1,301 51	1,769 25
34 Sarnia	.....	6,400 00	1,453 00	469 56	8,322 56
35 Sault Ste Marie	1,915 32	1,645 23	364 00	641 23	4,565 78
36 Stratford	508 00	671 00	.....	.....	1,179 00
37 Sturgeon Falls	.....	.....	42 00	.....	42 00
38 Sudbury	7,000 00	.....	.....	4,972 18	11,972 18
39 Thorold	452 25	.....	18 00	55 23	525 48
40 Toronto	23,137 75	168,074 00	18,345 50	31,826 04	241,383 29
41 Welland	780 11	116 69	206 00	.....	1,102 80
42 Whitby	656 85	854 71	.....	.....	1,511 56
43 Windsor	8,471 07	6,299 77	3,259 07	8,453 61	26,483 52
44 Woodstock	549 26	871 93	152 60	.....	1,573 79
Totals, 1919	140,294 41	340,914 50	38,171 04	312,754 45	832,134 40

*No report received.

AND ART SCHOOLS—Concluded

EVENING SCHOOLS

Financial Statement

Expenditure

	Teachers' Salaries	Buildings, sites and all permanent improvements	Repairs to school accommodation	Library, maps and charts, all apparatus and equipment	School books, stationery, prizes, fuel, examinations and all other expenses	Total expenditure
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	389 77	.....	.....	.....	.....	389 77
2	72 00	.....	.....	.....	6 75	78 75
3	1,945 00	.....	335 91	149 09	466 93	2,896 93
4	4,705 97	.....	.....	325 00	1,264 87	6,295 84
5	2,263 00	.....	.....	37 50	486 58	2,787 08
6	5,557 38	.....	.....	1,316 69	1,665 12	8,539 19
7	524 00	120 00	.....	152 90	85 98	882 88
8	859 97	.....	.....	285 95	395 81	1,541 73
9	147 00	.....	.....	.....	94 49	241 49
10	969 49	.....	.....	10 00	249 06	1,228 55
11	1,628 00	.....	.....	28 37	203 00	1,859 37
12	1,994 21	100 00	.....	66 95	229 86	2,391 02
13	434 00	.....	.....	.....	59 00	493 00
14	616 00	71 00	.....	.....	101 91	788 91
15	1,509 00	.....	.....	724 91	1,376 55	3,610 46
16	7,155 00	.....	205 70	1,303 69	1,993 99	10,658 38
17	45,264 71	2,283 09	476 42	8,386 46	41,856 91	98,267 59
18	926 00	.....	.....	59 50	297 41	1,282 91
19	700 00	.....	.....	45 00	15 00	760 00
20	3,701 30	260 00	.....	864 04	302 85	5,128 19
21	745 00	177 46	.....	.....	17 86	940 32
22	25,163 50	19,409 05	1,200 49	5,754 58	33,601 23	85,128 85
23	494 50	.....	.....	11 35	146 30	652 15
24	2,488 52	.....	.....	.....	25 00	2,513 52
25	1,386 00	.....	.....	290 95	116 00	1,792 95
26	676 00	30 00	55 06	132 05	138 00	1,031 11
27	26,961 50	81,307 20	.....	14,835 51	.....	123,104 21
28	2,645 50	514 75	.....	59 85	867 15	4,087 25
29	1,347 34	.....	.....	26 35	276 26	1,649 95
30	1,805 00	.....	.....	899 65	516 64	3,221 29
31	2,421 00	.....	.....	110 58	164 45	2,696 03
32	372 00	.....	.....	171 34	15 00	558 34
33	1,139 00	.....	.....	.....	256 86	1,395 86
34	1,068 99	6,164 65	.....	705 82	349 42	8,288 88
35	4,048 20	.....	.....	.....	517 58	4,565 78
36	934 00	.....	.....	.....	245 00	1,179 00
37	.....	.....	.....	.....	.....	.....
38	5,800 00	.....	.....	520 27	776 01	7,096 28
39	424 95	.....	.....	.....	65 50	490 45
40	150,197 92	6,733 34	11,110 03	10,290 18	50,941 96	229,273 43
41	976 24	.....	81 69	.....	44 87	1,102 80
42	858 00	.....	.....	467 56	186 00	1,511 56
43	9,612 48	.....	.....	12,926 72	2,557 78	25,096 98
44	1,266 00	.....	.....	.....	307 79	1,573 79
	324,193 44	117,170 54	13,465 30	60,958 81	143,284 73	659,072 82

TABLE Q—PROTESTANT SEPARATE SCHOOLS

——	No. 1 Grattan	No. 2 Hagarty	*No. 1 Tilbury, North	L'Original Village	Penetanguishene Town	Totals, 1919
Number of Schools	1	1	1	1	2	6
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Receipts:						
Balances from 1918	2,044 79	308 52	424 21	42 26	78 00	2,897 78
Government grants	80 00	301 75	168 99	29 40	202 00	782 14
Municipal grants	17 00	12 00	10 60	.....	.....	39 60
Municipal assessments	1,158 36	450 00	.....	755 30	10,000 00	12,363 66
Other sources	385 12	.....	6 90	150 92	145 32	688 26
Totals	3,685 27	1,072 27	610 70	977 88	10,425 32	16,771 44
Expenditure:						
Teachers' salaries	613 46	536 66	300 00	819 00	6,108 53	8,377 65
School sites and buildings	2,491 75	.....	.....	18 04	.....	2,509 79
Libraries, maps, apparatus, etc.	26 36	.....	.....	.....	133 88	160 24
Other expenses	526 71	87 45	39 33	73 93	3,872 59	4,600 01
Totals	3,658 28	624 11	339 33	910 97	10,115 00	15,647 69
Balances on hand	26 99	448 16	271 37	66 91	310 32	1,123 75
Teachers:						
Male	.....	.....	.....	.....	1	1
Female	1	1	1	1	7	11
Certificates	II	III	Temp.	II	1 I; 7 II	1 I; 9 II; 1 III; 1 Temp.
Salaries	$650	$700	$500	$600	Male, $1,500 Av. Fem. $721	1 male, $1,500 Av. Female, $682
Pupils:						
Total number attending	30	35	10	24	365	464
Boys	14	17	6	13	177	227
Girls	16	18	4	11	188	237
Average attendance	16	20	4	14	260	314
No. in Primer	12	8	1	3	87	111
" 1st Book	2	5	2	4	48	61
" 2nd "	7	10	2	5	86	110
" 3rd "	3	5	4	4	66	82
" 4th "	6	7	1	8	78	100
" Art	30	35	10	18	365	458
" Geography	30	35	7	11	278	361
" Music	30	35	.....	18	365	448
" Literature	30	35	10	11	365	451
" Composition	30	35	10	11	322	408
" Grammar	6	7	5	7	78	103
" English History	16	22	1	3	75	117
" Canadian History	16	22	5	7	129	179
" Physiology & Hygiene	30	35	10	18	365	458
" Nature Study	30	35	10	18	365	458
" Physical Culture	30	35	.....	18	365	448
" Agriculture	9	.....	.....	.....	.....	9
" Manual Training	.....	.....	.....	.....	322	322
Brick or frame school house	Brick	Frame	Brick	Brick	1 Br.; 1 Fr.	4 Br.; 2 Fr.
Number of maps	11	9	6	13	25	64
Number of globes	1	1	1	1	3	7

* Closed for fall term.

TABLE R—REPORT ON NIGHT SCHOOLS

I. Night Public and Separate Schools

Municipality	Number of Schools	Teachers	Pupils Enrolled	Average Daily Attendance
Port Colborne	1	2	16	8
Toronto	9	20	817	343
Weston	1	1	10	5
Totals, 1919-1920	11	23	843	356

II. Night High Schools

Municipality	Number of Schools	Teachers	Pupils Enrolled	Average Daily Attendance
Belleville	1	5	99	34
Brockville	1	4	134	27
Cobourg	1	4	39	7
Collingwood	1	3	39	16
Dundas	1	1	49	13
Fort William	1	4	84	45
Gananoque	1	2	49	21
Guelph	1	3	83	32
Hamilton	1	10	207	25
Kitchener	1	3	59	10
Lindsay	1	4	147	37
London	1	12	165	53
Newmarket	1	1	13	5
Niagara Falls	1	3	117	50
Ottawa	1	4	377	91
Port Arthur	1	2	39	14
Sarnia	1	3	151	33
St. Thomas	1	4	53	22
Toronto	3	85	2,858	1,146
Whitby	1	2	39	3
Windsor	1	6	211	95
Woodstock	1	1	30	10
Totals, 1919-1920	24	166	5,042	1,789

TABLE S—GENERAL

A General Statistical Abstract, exhibiting the comparative state and progress of Industrial and Technical Schools from the year 1867

No.	Subjects compared	1867	1872	1877	1882	1887
1	Population	.....	1,620,851	.....	1,926,922	.....
2	School population between the ages of five and sixteen years up to 1882, five to twenty-one subsequently.	447,726	495,756	494,804	483,817	611,212
3	High Schools (including Collegiate Institutes)	102	104	104	104	112
4	Continuation Schools	.....	.....	.....	.....	.....
5	Public Schools in operation	4,261	4,490	4,955	5,013	5,277
6	Roman Catholic Separate Schools	161	171	185	190	229
7	Grand total of above schools in operation	4,524	4,765	5,244	5,307	5,618
8	Pupils attending High Schools (including Collegiate Institutes and Night High Schools)	5,696	7,968	9,229	12,348	17,459
9	Pupils attending Continuation Sch'ls.	.....	.....	.....	.....	.....
10	Pupils attending Day Industrial, Technical and Art Schools	.....	.....	.....	.....	.....
11	Pupils attending Night Industrial, Technical and Art Schools	.....	.....	.....	.....	.....
12	Pupils attending Public Schools (including Kindergarten and Night Public Schools)	382,719	433,256	465,908	445,364	462,839
13	Pupils attending Roman Catholic Separate Schools	18,924	21,406	24,952	26,148	30,373
14	Grand total of students and pupils attending High, Continuation, Industrial and Technical, Public, and Separate Schools	407,339	462,630	500,089	483,860	510,671
15	Amount paid for the salaries of Public and Separate School teachers	$1,093,517	1,371,594	2,038,099	2,144,449	2,458,540
16	Total amount paid for Public and Separate School purposes	$1,473,189	2,207,364	3,073,489	3,026,975	3,742,104
17	Amount paid for Continuation School teachers' salaries	$.....	.....	.....	.....	.....
18	Total amount paid for Continuation School purposes	$.....	.....	.....	.....	.....
19	Amount paid for High School (and Collegiate Institute) teachers' salaries	$94,820	141,812	211,607	253,864	327,452
20	Total amount paid for High School and Collegiate Institute purposes.	$124,181	210,005	343,710	343,720	495,612
21	Amount paid for Industrial, Technical and Art School Teachers' Salaries	$.....	.....	.....	.....	.....
22	Total amount paid for Industrial, Technical and Art School purposes	$.....	.....	.....	.....	.....
23	Grand total paid for educational purposes as above	$1,597,370	2,417,369	3,417,199	3,370,695	4,237,716
24	Male Teachers in Public and Separate Schools	2,849	2,626	3,020	3,062	2,718
25	Female Teachers in Public and Separate Schools	2,041	2,850	3,448	3,795	4,876
26	Total Public and Separate School Teachers	4,890	5,476	6,468	6,857	7,594
27	Continuation School Teachers	.....	.....	.....	.....	.....
28	High School and Collegiate Institute Teachers	159	239	280	332	398
29	Day Industrial, Technical and Art School Teachers	.....	.....	.....	.....	.....
30	Number of all teachers, as specified above	5,049	5,715	6,748	7,189	7,992

* Included in Public and Separate School attendances. † Included with year ended six months after

STATISTICAL ABSTRACT

Education in Ontario, as connected with Public, Separate, Continuation, High, to 1918, compiled from Returns to the Department of Education

No.	1892	1897	1902	1907	1912	1917	1918	1919
1	2,114,321	.....	2,167,938	.....	‡2,523,358	.....	.....	.....
2	595,238	590,055	584,512	590,285	609,127	628,996	640,049	652,264
3	128	130	134	143	148	162	164	167
4	.....	44	65	107	138	137	136	138
5	5,577	5,574	5,671	5,819	5,939	6,103	6,136	6,179
6	312	340	391	449	513	548	559	559
7	6,017	6,088	6,261	6,518	6,738	6,950	6,995	7,043
8	22,837	24,390	24,472	30,331	32,608	§33,024	§35,217	§38,078
9	.....	*1,618	*2,190	*4,744	6,094	§5,104	§5,006	§5,126
10	.....	.....	.....	.....	.....	§3,674	§4,739	4,790
11	.....	.....	.....	.....	.....	§14,597	§16,733	26,527
12	458,553	453,256	420,094	413,510	429,030	458,436	458,286	472,572
13	37,466	41,620	45,964	51,502	61,297	70,048	71,302	74,833
14	518,856	519,266	490,530	495,343	529,029	584,883	591,283	621,926
15	2,752,629	2,886,061	3,198,132	4,389,524	6,109,547	8,398,450	9,027,151	10,160,399
16	4,053,918	4,215,670	4,825,160	7,556,179	11,273,960	14,111,835	15,176,723	18,851,627
17	.....	Included with No. 15	Included with No. 15	Included with No. 15	202,875	228,362	234,976	253,654
18	.....	Included with No. 16	Included with No. 16	Included with No. 16	265,087	324,621	332,853	388,701
19	472,029	532,837	547,402	783,782	1,232,537	1,554,049	1,637,476	1,801,602
20	696,114	715,976	769,680	1,213,697	1,953,061	2,418,975	2,586,114	2,748,042
21	.....	.....	.....	.....	.....	.....	246,077	324,193
22	.....	.....	.....	.....	.....	.....	493,200	659,073
23	4,750,032	4,931,646	5,594,840	8,769,876	13,492,108	16,855,431	18,588,890	22,647,443
24	2,770	2,784	2,311	1,813	1,511	1,317	1,068	1,328
25	5,710	6,344	7,320	8,387	9,617	11,445	11,877	12,061
26	8,480	9,128	9,631	10,200	11,128	12,762	12,945	13,389
27	.....	†44	†86	†140	226	241	234	244
28	522	579	593	750	917	1,051	1,088	1,168
29	.....	.....	.....	.....	.....	132	155	177
30	9,002	9,707	10,224	10,950	12,271	14,186	14,422	14,978

Public and Separate School teachers. ‡ Census of 1911. § Figures for the school the calendar year specified.

ASSOCIATION PUBLIC LIBRARIES

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
1	Admaston		No annual report for 1919					
2	Agincourt	R	400	431 16	1,080	5,724	209 71	362 54
3	Alliston		No annual report for 1919					
4	Alma		250	19 57	1,548	1,621	5 00	.....
5	Almonte	R	2,700	127 66	4,287	6,537	51 70	23 55
6	Alton		700	115 95	5,145	2,600	28 73	57 75
7	Angus		400	139 60	1,089	1,036	58 44	86 97
8	Arkona		363	199 64	2,907	1,690	33 52	37 29
9	Assiginack		No annual report for 1919					
10	Athens		775	170 45	1,815	1,954	40 62	116 56
11	Atwood		600	67 14	1,249	1,657	21 12	22 90
12	Auburn	R	250	129 82	1,653	1,416	46 83	33 41
13	Badjeros		Rural	35 10	714	.....	.....	14 70
14	Bancroft		Reorganized Nov. 20th, 1920					
15	Bath	R	370	225 90	1,165	4,281	43 86	30 30
16	Bayfield		400	157 47	825	3,098	45 78	94 22
17	Bayham		Rural	115 50	1,105	257	47 11	96 50
18	Baysville		168	116 82	1,014	2,290	27 39	76 33
19	Beachville		No annual report for 1919					
20	Beechwood		Rural	193 43	1,290	695	74 05	138 93
21	Belwood		183	50 00	2,710	1,265	10 00	.....
22	Birchcliff		Organized, Dec. 4th, 1920					
23	Blenheim	R	1,650	643 47	5,387	13,174	105 82	159 67
24	Bloomfield		800	14 00	1,374	199	.....	.....
25	Blyth		800	68 40	2,507	6,000	12 24	12 80
26	Bobcaygeon	R	844	274 58	3,406	3,267	78 80	83 71
27	Bolton		675	113 65	3,047	150	.....	.....
28	Bowmanville	R	3,500	546 77	4,830	9,979	122 35	221 57
29	Bridgeburg		2,145	326 19	2,720	6,712	84 91	155 02
30	Brigden		No annual report for 1919					
31	Brooklin		Rural	114 93	3,263	2,533	25 78	42 05
32	Brownsville		250	316 48	1,555	2,854	22 07	127 18
33	Brucefield		200	54 00	1,929	990	15 00	.....
34	Burgessville		200	156 34	991	1,656	35 03	60 79
35	Burlington	R	2,700	602 01	4,591	4,808	57 47	193 93
36	Burnstown		No annual report for 1919					
37	Caledon		560	439 72	3,168	1,695	39 31	44 22
38	Cambray		Rural	152 13	2,330	1,624	55 03	100 88
39	Camden East		Re-organized Aug. 18th, 1920					
40	Canfield		165	76 45	1,034	1,623	27 47	38 15
41	Cannington	R	1,000	215 01	1,897	4,323	45 54	88 69
42	Capreol		1,500	318 47	475	800	20 00	306 70
43	Cargill		425	282 14	3,361	5,292	128 52	217 04
44	Chatsworth		374	142 55	1,654	791	34 12	58 95
45	Cheapside		75	85 57	2,475	1,185	32 62	70 82
46	Chesterville		No annual report for 1919					
47	Claremont		325	94 18	2,719	1,472	31 80	49 88
48	Clarksburg	R	600	458 90	2,376	4,304	127 96	191 00
49	Clarkson		200	107 62	260	54	60 01	90 03
50	Claude		Rural	76 80	3,514	1,042	27 43	62 95
51	Cobourg	R	4,800	686 68	5,374	18,836	94 99	197 54
52	Colborne	R	1,000	117 70	2,198	806	45 78	34 45
53	Coldstream	R	100	62 73	2,075	1,944	30 14	31 03
54	Coldwater		600	116 63	2,187	7,658	19 49	36 02
55	Comber	R	600	246 02	2,763	3,880	57 32	54 64
56	Cookstown		475	57 57	1,813	846	10 00	.....
57	Copleston		No annual report for 1919					
58	Copper Cliff		4,000	1,040 98	2,088	14,673	193 60	563 15
59	Delta		400	170 64	943	2,127	51 83	126 38
60	Depot Harbour		No annual report for 1919					
61	Don		200	154 01	1,745	810	56 00	99 34
62	Dorchester		500	120 89	1,782	2,393	12 74	57 15
63	Drumbo		400	164 25	2,964	2,968	56 94	120 50

ASSOCIATION PUBLIC LIBRARIES—Continued

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
64	Duart		No annual report for 1919					
65	Dundalk		750	141 78	2,989	3,486	23 08	59 43
66	Dungannon		Rural	180 10	2,573	2,884	46 32	108 49
67	Dunnville		3,450	1,793 64	5,603	14,113	20 00	1,330 34
68	Dutton	R	850	298 51	2,606	2,664	400 00	80 25
69	East Linton		175	126 17	169	10	23 51	109 96
70	Elmvale		300	104 57	2,525	1,719	34 39	38 78
71	Elmwood		Rural	120 45	1,572	2,218	33 12	39 20
72	Embro	R	500	157 90	4,985	5,101	40 42	51 65
73	Emo		Rural	148 09	653	876	41 59	68 95
74	Emsdale		No annual report for 1919					
75	Ennotville		Rural	169 05	4,840	1,174	62 05	102 05
76	Espanola		2,800	552 42	1,068	1,077	113 30	295 42
77	Ethel		225	121 62	1,976	3,291	42 69	76 60
78	Fenelon Falls	R	900	453 08	4,837	4,221	49 38	69 42
79	Fenwick		No annual report for 1919					
80	Flesherton		482	77 82	1,194	458	20 86	36 91
81	Fonthill	R	700	329 36	3,979	5,497	80 39	136 01
82	Fordwich		360	147 36	2,257	1,200	30 83	57 69
83	Forester's Falls		175	97 10	1,385	1,837	35 73	59 35
84	Fort Erie		2,300	273 13	4,218	3,564	28 82	67 28
85	Frankford	R	900	142 20	1,059	558	42 04	6 20
86	Fullarton		No annual report for 1919					
87	Glamis		Rural	39 56	977	1,067	10 00	.....
88	Glanworth		500	91 52	472	919	31 96	54 31
89	Glen Allan		200	47 46	1,457	803	17 43	22 70
90	Glen Morris	R	200	158 65	3,061	811	69 25	70 75
91	Gore Bay	R	750	180 55	1,575	1,486	54 27	.....
92	Gore's Landing		200	40 63	1,640	279	10 00	.....
93	Gorrie		400	38 64	2,145	493	10 00	.....
94	Grafton		250	81 08	1,127	911	34 34	67 08
95	Haileybury		4,000	113 33	173	.....	.....	.....
96	Haliburton		990	144 35	1,873	2,473	31 78	101 26
97	Harrietsville		Rural	187 60	963	2,010	75 83	151 95
98	Harrington		200	124 52	2,001	1,612	57 73	89 15
99	Harrow	R	750	316 14	1,999	3,996	56 52	80 37
100	Hastings		No annual report for 1919					
101	Hawkesbury		5,276	181 25	706	1,821	45 89	44 97
102	Hawkesville		200	9 96	924	100	5 00	.....
103	Hepworth		400	5 00	450	806	10 00	.....
104	Highgate	R	650	158 80	388	281	48 59	80 30
105	Highland Creek		650	54 47	1,785	1,284	14 36	10 54
106	Hillsdale		300	99 22	2,018	1,434	15 83	56 85
107	Hillview		294	48 90	601	960	21 99	36 84
108	Holstein		300	127 87	2,211	3,164	35 49	57 40
109	Honeywood		100	45 80	865	702	29 90	41 20
110	Huntsville	R	2,113	368 89	4,349	2,865	61 71	66 22
111	Inglewood		400	139 51	1,418	978	60 87	100 21
112	Inwood		Rural	168 66	1,772	2,526	61 65	99 65
113	Iroquois		840	115 82	1,912	1,200	27 41	45 48
114	Islington		231	192 92	3,082	5,412	84 88	122 25
115	Jarvis	R	500	192 80	3,800	3,812	69 63	105 05
116	Kars		Rural	82 65	1,798	984	31 48	42 15
117	Kearney		Re-organized March 2nd, 1920					
118	Kemble		400	180 07	1,397	1,305	34 51	41 80
119	Kinmount		400	145 07	1,617	3,852	10 00	79 00
120	Kirkfield		108	179 92	2,513	1,256	78 79	121 42
121	Kirkton		Rural	102 28	645	1,205	33 63	63 08
122	Komoka		300	142 66	1,466	2,021	42 01	89 37
123	Lake Charles		No annual report for 1919					
124	Lefroy		Rural	59 62	942	2,115	13 91	15 05
125	Linwood		No annual report for 1919					

ASSOCIATION PUBLIC LIBRARIES—Continued

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
126	Lorne Park	.....	230	72 35	424	121	27 97	35 95
127	Lucan	.....	700	290 77	1,638	2,636	38 38	23 82
128	Lyn	R	250	196 95	987	2,039	58 55	90 70
129	Madoc	R	1,200	307 05	2,796	5,783	34 03	29 75
130	Mandamin	.....	No annual report for 1919					
131	Manilla	.....	200	259 35	5,068	2,220	91 07	142 15
132	Manotick	.....	No annual report for 1919					
133	Maple	.....	350	41 85	921	478	.....	7 70
134	Markham	.....	No annual report for 1919					
135	Marksville	.....	No annual report for 1919					
136	Marmora	.....	Organized May 17th, 1920					
137	Martintown	.....	346	209 36	897	1,990	20 71	122 63
138	Matilda	.....	300	48 64	515	326	14 60	37 79
139	Maxville	.....	Re-organized July 26th, 1920					
140	Meaford	R	2,500	751 57	4,868	11,944	108 92	182 55
141	Melbourne	.....	196	7 75	1,254	10	10 00	.....
142	Metcalfe	.....	No annual report for 1919					
143	Mildmay	.....	700	51 41	2,634	1,137	10 76	13 40
144	Millbank	.....	300	361 42	403	.....	170 91	293 47
145	Millgrove	.....	No annual report for 1919					
146	Milton	.....	1,950	234 41	4,850	2,497	40 55	91 96
147	Minden	.....	300	71 54	2,080	1,993	26 19	32 39
148	Monkton	.....	350	47 63	1,426	726	19 78	14 90
149	Mono Centre	.....	58	29 76	874	713	21 99	28 65
150	Mono Mills	.....	No annual report for 1919					
151	Mono Road	.....	Rural	31 00	1,401	1,100	5 00	.....
152	Moorefield	.....	600	156 03	246	562	72 76	141 63
153	Morrisburg	R	1,500	403 67	3,511	2,800	95 68	89 73
154	Morriston	.....	2,733	47 13	1,462	1,074	10 00	.....
155	Mount Albert	R	600	281 82	1,397	2,515	81 93	123 01
156	Mount Brydges	.....	800	103 22	1,200	1,376	16 96	20 20
157	Mount Hope	.....	200	401 44	383	665	137 93	274 23
158	Nanticoke	.....	130	75 73	2,545	1,239	13 44	16 56
159	Napanee	R	3,000	1,045 10	8,061	15,707	260 00	530 70
160	Napier	.....	200	41 93	573	757	20 54	36 69
161	Newburgh	R	426	220 26	2,420	924	53 45	58 26
162	Newbury	.....	300	184 31	124	1,817	42 98	88 52
163	New Dundee	R	360	165 48	1,241	2,334	79 39	59 88
164	Newington	.....	300	42 68	1,048	2,226	10 00	15 38
165	Niagara	R	1,685	398 07	9,192	15,469	123 45	155 42
166	Norland	.....	800	64 67	1,339	1,882	13 26	29 00
167	North Cobalt	.....	No annual report for 1919					
168	North Gower	.....	350	113 80	2,330	3,016	10 00	.....
169	Norwood	.....	800	94 30	2,559	2,173	.....	19 30
170	Oakville	R	3,000	787 02	5,893	8,062	131 92	154 08
171	Odessa	R	700	278 53	1,394	7,942	31 35	45 37
172	Omemee	R	550	173 92	1,716	687	29 39	34 70
173	Orono	.....	No annual report for 1919					
174	Oxford Mills	.....	300	4 35	1,319	216	15 00	.....
175	Pakenham	.....	No annual report for 1919					
176	Palermo	.....	Organized Nov. 5th, 1920					
177	Parkhead	.....	Rural	120 61	596	1,256	27 07	87 03
178	Pickering	R	600	153 95	1,900	1,222	27 09	23 37
179	Pinkerton	.....	Rural	73 22	2,148	1,354	25 56	37 84
180	Plattsville	R	600	224 42	2,747	3,129	67 30	107 90
181	Plympton	.....	335	110 38	1,509	2,087	33 52	73 65
182	Point Edward	.....	890	157 28	4,090	2,741	51 58	91 73
183	Port Credit	.....	1,300	149 06	3,113	4,985	26 86	89 11
184	Port Dover	R	1,100	239 10	1,487	1,857	61 50	82 55
185	Port Perry	R	1,200	401 94	2,559	4,700	77 33	42 82
186	Port Stanley	.....	750	190 69	2,199	2,182	34 19	68 91
187	Powassan	.....	600	320 39	718	3,510	136 67	251 03
188	Princeton	.....	No annual report for 1919					

ASSOCIATION PUBLIC LIBRARIES—Concluded

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on books in 1919
				$ c.			$ c.	$ c.
189	Queensville		290	106 92	3,101	2,486	26 96	63 49
190	Rainy River		No annual report for 1919					
191	Ridgetown	R	2,300	240 49	4,210	7,098	82 37	62 43
192	Ripley		No annual report for 1919					
193	Riversdale		400	73 65	1,540	1,658	17 82	37 25
194	Rodney		656	190 40	1,095	687	38 34	156 19
195	Romney		Rural	98 39	3,725	1,137	36 08	64 49
196	Runnymede		Rural	159 10	2,454	9,348	36 42	96 30
197	Russell	R	700	355 21	591	308	104 83	139 72
198	St. George	R	700	320 75	5,401	2,068	62 98	85 68
199	St. Helen's		Rural	136 67	1,849	1,943	36 52	78 08
200	Saltfleet		250	232 26	2,997	7,221	69 90	163 60
201	Scarboro		Rural	180 31	5,078	1,890	93 91	158 96
202	Scotland	R	400	221 53	1,990	2,128	55 14	41 20
203	Shedden		350	119 98	2,162	1,850	26 37	37 03
204	Shetland		250	52 26	891	864	22 41	26 52
205	Singhampton		100	36 72	307	151	15 32	26 45
206	Smithville		600	93 44	1,078	3,970	131 17	.....
207	Solina		Rural	47 21	500	411	31 31	43 91
208	Sombra		No annual report for 1919					
209	Sonya		Organized Feb. 20th, 1920					
210	Southampton		1,680	194 20	5,890	6,738	55 89	110 90
211	South Mountain		No annual report for 1919					
212	Sparta		No annual report for 1919					
213	Speedside		250	36 50	1,595	520	13 88	16 21
214	Stevensville		350	112 60	873	1,368	21 38	82 85
215	Strathcona		550	61 04	1,639	707	.....	34 30
216	Swansea	R	Rural	196 49	154	71	104 78	136 22
217	Sydenham	R	200	260 25	1,811	2,822	41 30	52 35
218	Thamesford		500	178 93	2,236	1,796	39 89	81 95
219	Thamesville	R	742	273 56	2,393	2,086	81 51	77 44
220	Thedford		600	134 76	3,354	4,282	50 53	83 42
221	Thornbury		725	3 65	1,376	2,168	5 00	3 60
222	Thorndale		420	242 83	783	6,380	72 24	123 08
223	Thornhill		Reorganized Oct. 8th, 1920					
224	Tiverton		325	65 75	1,079	1,585	15 00	15 75
225	Tottenham		600	58 00	2,598	1,713	12 90	25 65
226	Trout Creek		454	59 26	1,216	605	16 05	33 00
227	Tweed		1,400	204 69	2,270	7,265	39 67	33 20
228	Underwood		216	424 35	375	517	20 00	296 45
229	Unionville		400	86 78	1,591	1,611	24 50	34 47
230	Vankleek Hill		1,800	10 00	1,581	.....	.....	.....
231	Victoria		Rural	179 51	3,732	761	38 77	86 30
232	Victoria Mines		1,500	93 46	1,432	2,229	48 23	51 95
233	Victoria Road		150	102 68	473	186	38 38	57 30
234	Walton		Rural	126 64	1,487	1,715	35 70	108 06
235	Wardsville		221	115 05	2,128	2,541	35 14	62 85
236	Warkworth		408	190 57	1,509	492	23 66	46 21
237	Waterdown	R	850	540 91	938	3,502	173 17	285 06
238	Welland	R	9,500	526 27	5,298	13,012	90 52	146 86
239	Wellesley	R	No annual report for 1919					
240	Westford		150	78 70	2,119	2,407	35 23	74 20
241	West Lorne		800	150 76	1,470	2,255	46 21	79 35
242	White Lake		350	50 65	925	580	12 40	37 40
243	Wiarton	R	1,560	407 81	3,421	3,753	70 25	86 09
244	Williamstown		Rural	80 81	2,424	694	20 12	25 36
245	Winchester	R	1,037	180 54	1,845	4,322	37 67	60 90
246	Woodville	R	500	202 35	2,680	1,178	38 23	20 80
247	Worthington	R	350	342 71	600	1,208	83 76	140 42
248	Wyoming		495	12 14	1,220	475	10 00	.....
249	Zephyr		400	142 19	1,514	1,865	31 63	93 20
250	Zurich		1,500	107 06	600	1,002	47 13	101 67
	Total		150,949	39,851 24	436,654	552,288	9,963 21	16,921 59

FREE PUBLIC LIBRARIES

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on books in 1919
				$ c.			$ c.	$ c.
1	Acton	.....	2,000	417 70	4,041	10,095	115 83	198 79
2	Ailsa Craig	.....	No annual report for 1919					
3	Amherstburg	R	2,700	1,122 61	4,502	12,750	101 83	220 67
4	Arnprior	.....	4,500	381 85	4,067	4,560	155 52	306 89
5	Arthur	R	1,009	260 75	3,833	5,815	50 02	100 42
6	Aurora	R	2,700	1,025 47	3,463	8,448	55 06	60 88
7	Aylmer	R	2,300	1,061 13	8,699	17,282	180 79	296 82
8	Ayr	R	809	534 00	4,125	6,834	96 06	115 74
9	Barrie	R	6,422	3,867 61	6,673	34,104	260 00	496 28
10	Beamsville	R	1,164	544 04	5,258	8,424	65 14	93 56
11	Beaverton	R	1,016	298 92	1,949	905	54 02	63 50
12	Beeton	.....	600	151 65	2,540	2,166	34 64	59 50
13	Belleville	R	12,345	4,563 30	9,978	34,823	260 00	1,252 32
14	Belmont	.....	No annual report for 1919					
15	Bothwell	.....	650	248 56	3,057	5,082	53 97	134 43
16	Bracebridge	R	2,303	1,206 00	5,680	13,688	169 68	233 45
17	Brampton	R	4,500	1,677 56	7,390	23,374	245 11	288 07
18	Brantford	R	30,549	9,358 64	29,352	113,913	260 00	1,694 26
19	Brighton	R	1,350	261 93	4,080	2,185	50 76	45 30
20	Brockville	R	9,324	2,034 34	15,443	18,552	240 87	410 72
21	Brussels	R	1,000	778 83	4,733	5,322	120 58	108 51
22	Burk's Falls	R	1,000	280 17	3,085	2,668	.....	.....
23	Campbellford	R	3,100	1,378 07	4,119	19,189	227 41	464 72
24	Cardinal	R	1,147	209 68	2,769	3,052	37 89	23 13
25	Carleton Place	R	3,844	616 67	7,464	13,881	127 52	214 14
26	Cayuga	.....	800	139 65	1,921	1,686	24 96	24 15
27	Chatham	R	15,030	4,140 39	11,060	58,539	260 00	877 56
28	Chesley	R	1,741	472 25	3,101	5,288	112 19	104 50
29	Clifford	.....	600	212 51	1,377	4,560	42 86	101 85
30	Clinton	R	2,300	973 62	7,611	16,726	147 85	208 42
31	Collingwood	R	7,262	3,317 40	9,992	18,039	258 19	429 71
32	Cornwall	R	6,918	1,445 45	5,934	12,438	175 18	307 04
33	Delhi	R	900	239 17	2,438	2,468	62 45	59 07
34	Deseronto	R	2,117	316 87	6,757	6,860	57 34	19 77
35	Drayton	R	625	225 87	3,698	5,663	50 46	6 18
36	Dresden	R	1,500	721 24	1,921	1,969	86 20	73 80
37	Dundas	R	5,009	2,187 03	9,249	38,646	215 84	582 08
38	Durham	R	1,540	536 43	3,836	6,632	47 94	48 75
39	Elmira	R	2,097	760 21	5,284	9,042	178 46	315 67
40	Elora	R	1,177	724 28	8,552	8,364	105 26	156 38
41	Erin	.....	525	194 69	3,225	6,500	69 10	111 35
42	Essex	R	1,715	774 49	3,901	5,375	117 94	206 99
43	Exeter	R	1,431	873 09	5,050	10,047	90 66	148 82
44	Fergus	R	1,850	1,335 36	5,190	10,632	134 01	172 25
45	Forest	R	1,416	617 69	4,115	12,843	50 08	113 10
46	Fort Frances	R	2,849	1,798 71	3,588	9,308	249 27	425 06
47	Fort William	R	19,886	13,548 33	28,518	97,616	260 00	2,322 45
48	Fort William, Br.	R	.....	7,126 21	2,042	12,287	260 00	2,500 00
49	Galt	R	13,000	4,757 12	10,516	45,043	260 00	606 43
50	Gananoque	R	3,604	1,055 36	5,730	20,490	201 55	297 25
51	Garden Island	.....	No annual report for 1919					
52	Georgetown	R	2,100	756 06	4,238	12,100	117 64	200 88
53	Glencoe	.....	No annual report for 1919					
54	Goderich	R	4,700	1,551 28	6,078	19,353	204 75	336 91
55	Grand Valley	R	700	552 30	3,290	6,515	68 22	84 05
56	Gravenhurst	.....	1,702	145 52	2,256	1,717	32 40	48 03
57	Grimsby	R	2,000	1,569 33	4,361	18,390	209 71	306 62
58	Guelph	R	17,052	5,999 82	19,553	75,847	260 00	777 64
59	Hagersville	R	1,200	575 10	2,277	1,751	107 17	133 28
60	Hamilton	R	108,000	68,857 24	50,283	324,634	260 00	5,228 35
61	Hamilton, Branch	R	.....	1,425 85	7,809	95,021	260 00	1,220 86

FREE PUBLIC LIBRARIES—Continued

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on books in 1919
				$ c.			$ c.	$ c.
62	Hanover	R	3,300	950 03	3,548	10,973	170 80	299 00
63	Harriston	R	1,400	940 65	4,053	18,319	138 22	219 80
64	Hensall	.....	800	293 24	2,068	4,770	94 02	168 74
65	Hespeler	R	3,000	737 06	5,182	13,790	134 87	204 65
66	Ingersoll	R	5,347	1,697 03	6,462	22,442	171 02	243 90
67	Kemptville	R	1,150	486 93	4,198	9,428	106 65	150 00
68	Kenora	R	5,000	2,646 25	4,076	15,096	148 63	313 32
69	Kincardine	R	2,306	656 83	4,533	4,535	69 71	95 51
70	Kingston	R	23,267	5,368 95	12,419	74,047	260 00	2,221 13
71	Kingsville	R	2,000	622 28	3,441	10,116	99 97	145 23
72	Kintore	.....	280	151 93	1,854	2,037	48 09	81 00
73	Kitchener	R	19,767	6,841 27	15,697	58,969	260 00	1,041 01
74	Lakefield	R	1,197	526 25	695	4,760	20 00	267 64
75	Lanark	.....	625	172 75	1,995	3,125	37 87	76 25
76	Lancaster	.....	700	170 32	5,010	2,693	25 72	28 69
77	Leamington	R	4,000	1,304 54	6,075	21,097	240 10	451 03
78	Lindsay	R	8,200	2,145 31	7,901	21,631	251 45	402 91
79	Listowel	R	2,600	682 36	5,182	10,673	163 31	230 32
80	Little Britain	R	200	224 22	3,026	2,863	55 21	59 58
81	London	R	59,100	16,682 57	41,413	234,767	260 00	3,213 59
82	London East	R	.....	2,624 21	5,564	52,446	260 00	914 89
83	London South	.....	.....	1,690 89	2,149	21,679	200 00	981 39
84	Lucknow	R	990	937 24	3,539	5,271	154 10	262 76
85	Markdale	R	925	704 62	3,446	7,072	64 98	70 41
86	Merrickville	.....	950	166 18	3,042	8,010	20 00	.....
87	Merritton	.....	2,650	140 56	2,638	7,662	20 00	.....
88	Midland	R	7,334	1,801 01	7,921	33,793	223 00	352 87
89	Millbrook	R	746	314 92	2,880	7,372	110 33	120 21
90	Milverton	R	1,044	705 32	3,096	4,369	78 68	222 45
91	Mimico	R	2,498	2,011 70	3,250	16,044	209 80	452 65
92	Mitchell	R	1,596	833 26	5,545	5,402	69 68	102 50
93	Mount Forest	R	2,500	745 41	4,340	14,987	89 37	145 95
94	New Hamburg	R	1,356	612 95	2,894	6,861	79 70	110 91
95	New Liskeard	R	2,000	2,296 85	4,616	9,910	213 96	372 01
96	Newmarket	R	3,600	595 61	4,561	9,338	107 09	128 68
97	Niagara Falls	R	14,307	5,134 06	16,212	61,563	260 00	1,216 73
98	North Bay	R	10,183	3,758 72	6,511	25,202	260 00	725 82
99	Norwich	R	1,262	1,189 38	3,988	9,098	135 62	278 14
100	Oakwood	R	300	147 94	2,117	1,710	52 39	39 11
101	Orangeville	R	2,173	1,590 30	6,869	16,441	158 56	208 93
102	Orillia	R	8,058	2,350 82	7,822	32,484	260 00	601 77
103	Oshawa	R	9,700	1,753 07	5,920	27,292	189 42	355 05
104	Ottawa	R	107,732	31,913 83	67,893	251,738	260 00	4,805 07
105	Ottawa, South	R	.....	1,609 87	2,424	12,980	204 64	294 28
106	Ottawa, West	R	.....	2,645 35	4,673	21,828	251 52	460 77
107	Otterville	.....	600	169 89	2,014	5,077	73 22	109 62
108	Owen Sound	R	12,000	3,155 43	6,686	41,533	260 00	646 45
109	Paisley	R	730	364 61	5,661	8,304	83 43	106 75
110	Palmerston	R	2,200	1,108 67	2,983	7,210	88 21	145 44
111	Paris	R	4,866	1,515 09	12,125	28,548	209 06	293 11
112	Parkhill	R	1,400	659 85	2,638	3,405	88 06	138 01
113	Parry Sound	.....	3,850	1,375 41	3,925	18,509	184 01	527 43
114	Pembroke	R	8,000	2,523 50	6,447	21,103	260 00	814 42
115	Penetanguishene	R	3,928	1,343 56	6,603	11,685	181 30	242 60
116	Perth	R	4,100	1,568 97	4,336	16,713	85 61	105 78
117	Peterborough	R	21,230	6,885 03	16,645	67,049	260 00	903 27
118	Picton	R	3,500	1,959 91	7,666	24,443	260 00	406 08
119	Port Arthur	R	15,094	10,654 06	15,632	81,290	260 00	1,602 28
120	Port Carling	R	400	315 25	2,018	2,517	93 08	128 27
121	Port Colborne	R	3,200	700 92	2,469	10,595	197 82	311 82

FREE PUBLIC LIBRARIES—Continued

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
122	Port Elgin	R	1,500	912 52	5,089	12,457	87 32	207 10
123	Port Hope	R	4,290	1,598 57	7,526	23,817	185 93	389 49
124	Port Rowan	.....	626	205 53	1,892	1,796	32 76	31 61
125	Prescott	R	2,660	538 44	6,877	15,057	105 59	159 14
126	Preston	R	5,184	2,238 13	8,957	26,431	179 98	276 36
127	Renfrew	.....	6,384	1,537 02	4,018	26,915	253 62	501 60
128	Richmond Hill	R	930	316 89	4,578	6,764	72 84	85 58
129	Ridgeway	.....	750	92 02	2,578	3,389	18 44	9 20
130	St. Catharines	R	19,195	6,862 09	12,233	59,591	260 00	1,247 95
131	St. Mary's	R	3,886	1,064 25	9,503	21,380	179 06	263 32
132	St. Thomas	R	17,207	4,640 22	16,745	71,796	260 00	1,020 13
133	Sarnia	R	12,699	4,436 88	12,797	47,735	260 00	1,225 32
134	Sault Ste. Marie	R	20,000	8,884 36	9,037	72,304	260 00	3,392 59
135	Sault Ste. Marie, West	R	.....	1,416 65	1,073	121	251 51	692 49
136	Schreiber	R	1,021	746 03	1,659	4,113	20 46	32 75
137	Seaforth	R	2,025	972 39	5,602	17,253	134 20	161 11
138	Shelburne	R	1,100	640 34	4,519	6,545	76 51	158 42
139	Simcoe	R	4,010	2,446 32	10,464	25,986	237 28	454 53
140	Smith's Falls	R	6,665	1,824 43	6,440	22,397	207 07	295 56
141	South River	.....	600	109 06	1,232	1,308	26 17	42 81
142	Springfield	.....	426	55 98	1,619	1,680	10 00	.....
143	Stayner	.....	1,000	156 57	2,332	1,639	33 96	37 95
144	Stirling	R	850	637 12	2,453	5,661	121 07	243 46
145	Stouffville	R	1,025	360 34	5,994	6,460	115 10	135 93
146	Stratford	R	18,106	3,660 11	15,479	61,798	260 00	930 94
147	Strathroy	R	2,637	716 34	9,251	27,001	118 23	122 32
148	Streetsville	.....	550	265 37	2,907	2,288	35 00	53 45
149	Sudbury	R	8,227	2,173 78	2,285	15,147	187 75	369 86
150	Sundridge	.....	450	78 47	1,060	640	24 58	47 82
151	Sutton West	R	850	198 40	1,854	5,043	66 55	91 80
152	Tara	R	560	459 83	1,976	3,657	77 27	68 61
153	Tavistock	R	980	1,363 17	4,393	12,591	112 99	147 99
154	Teeswater	R	900	586 57	5,120	4,668	99 32	156 56
155	Thorold	R	4,325	1,279 10	6,505	6,626	77 14	103 25
156	Tilbury	.....	No annual report for 1919					
157	Tillsonburg	R	3,000	1,486 39	4,678	26,501	194 52	237 15
158	Toronto, Beaches	R	511,246	8,159 96	10,073	105,908	239 30	1,327 35
159	" Church	R	.....	16,826 19	56,807	96,085	260 00	1,317 09
160	" College	R	.....	68,923 38	140,414	482,473	260 00	10,088 20
161	" Deer Park	R	.....	7,097 79	10,126	72,649	244 30	878 00
162	" Dovercourt	R	.....	15,830 35	18,178	203,849	260 00	2,195 05
163	" Earlscourt	R	.....	5,884 39	8,613	83,874	227 05	1,097 50
164	" Eastern	R	.....	3,175 88	4,775	20,140	214 30	439 00
165	" High Park	R	.....	10,105 63	12,773	137,396	239 30	1,975 50
166	" Municipal	R	.....	1,417 35	1,332	8,484	141 88	204 00
167	" Northern	R	.....	4,102 91	7,505	29,001	220 30	658 50
168	" Queen & Lisgar	R	.....	7,456 81	16,684	91,815	250 00	1,102 50
169	" Riverdale	R	.....	13,854 39	18,225	174,269	260 00	1,536 50
170	" Western	R	.....	7,674 09	13,290	105,032	249 30	1,322 00
171	" Wychwood	R	.....	7,991 63	10,410	86,695	222 30	1,097 50
172	" Yorkville	R	.....	8,604 72	14,158	57,409	250 00	888 00
173	Trenton	.....	No annual report for 1919					
174	Uxbridge	R	1,579	653 03	6,786	10,459	81 89	169 81
175	Walkerton	R	2,500	1,284 91	4,283	9,556	107 38	179 19
176	Walkerville	R	6,279	4,269 20	9,398	44,169	260 00	756 01
177	Wallaceburg	R	4,067	2,330 38	4,288	27,107	206 36	402 90
178	Waterford	.....	1,010	118 65	1,159	675	15 00	.....

FREE PUBLIC LIBRARIES—Concluded

Statistics, 1919, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
179	Waterloo	R	5,476	2,218 01	12,042	21,111	260 00	287 65
180	Watford	R	1,075	603 76	4,538	7,215	65 71	104 68
181	Weston	R	2,495	1,698 41	4,857	22,619	252 68	613 49
182	Whitby	R	3,469	1,210 96	3,885	13,535	145 98	190 57
183	Windsor	R	31,485	10,681 39	28,330	95,510	260 00	1,742 96
184	Wingham	R	2,358	994 50	6,897	9,314	250 94	395 82
185	Woodstock	R	10,126	3,646 36	12,446	47,009	260 00	546 42
186	Wroxeter	.....	350	216 55	5,654	2,337	67 16	127 55
	Total	.....	1,479,052	580,051 58	1,470,288	5,628,417	27,686 01	100,093 13

Notes from Public Libraries' Register

Two libraries were added to the list of Free Libraries during 1920; Kingston and Strathroy: they were formerly Association Libraries.

Ten Association Libraries were placed on the list, six of which were re-organized libraries, and four were new libraries. Those re-organized were Camden East, Bancroft, Dutton, Kearney, Maxville, and Thornhill. The new libraries were Birchcliff, Marmora, Palermo and Sonya.

Grants to Historical, Literary and Scientific Institutions

The following Historical, Literary and Scientific Institutions, etc., duly reported according to the requirements of the Act, and received the undermentioned grants during the fiscal year ending October 31st, 1920:

	$ c.
Brant Historical Society	100 00
Elgin Historical and Scientific Association	100 00
Essex Historical Society	100 00
Huron Institute	100 00
Kent Historical Society	100 00
Kingston Historical Society	100 00
L'Alliance Française, Ottawa	400 00
Lennox and Addington Historical Society	100 00
Lundy's Lane Historical Society	200 00
London and Middlesex Historical Society	100 00
Niagara Historical Society	200 00
Ontario Historical Society	800 00
Thunder Bay Historical Society, Fort William	100 00
Wentworth Historical Society	200 00
Women's Canadian Historical Society of Ottawa	200 00
Women's Canadian Historical Society of Toronto	100 00
Women's Wentworth Historical Society	300 00
Hamilton Scientific Association	400 00
Canadian Institute	2,500 00
Club Litteraire Canadien Français, Ottawa	300 00
L'Institut Canadien Français, Ottawa	300 00
Ottawa Field Naturalists' Club	200 00
Royal Astronomical Society, Toronto	600 00
Society of Chemical Industry	300 00
Ontario Library Association	400 00
Reading Camp Association	4,500 00
St. Patrick's Literary Association of Ottawa	200 00
Canadian Free Library for the Blind	700 00
Waterloo Historical Society	100 00
United Empire Loyalists	200 00
York Pioneers	200 00
Ottawa Association for the Blind	1,000 00
Institut Jeanne D'Arc, Ottawa	200 00
Le Cercle Social, Ottawa	200 00
Folk Lore Society	100 00
Grenville Pioneer and Historical Society	100 00

APPEN-

TEACHERS'

FINANCIAL

Name of Institute	Total Registered Attendance of Members	Receipts		
		Government Grant	Municipal Grant	Members' Fees
		$ c.	$ c.	$ c.
1 Algoma East	140	50 00	.....	71 00
2 Algoma (Eastern Division)	27	50 00	.....	11 00
3 Brant	140	50 00	50 00	30 00
4 Bruce East	104	50 00	50 00	.....
5 Bruce West	106	50 00	50 00	26 50
6 Carleton East	141	50 00	50 00	70 50
7 Carleton West, and Lanark East	108	50 00	50 00	83 25
8 Dufferin	108	.....	100 00	.....
9 Dundas	102	50 00	50 00	57 00
10 Elgin East	106	50 00	50 00	25 75
11 Elgin West	115	50 00	22 00	49 25
12 Essex North	58	25 00	50 00	.....
13 Essex South	171	100 00	50 00	35 25
14 Frontenac North, and Addington	47	50 00	30 62	24 50
15 Frontenac South	103	50 00	50 00	25 50
16 Glengarry	110	50 00	100 00	21 00
17 Grey East	85	50 00	50 00	.....
18 Grey South	92	100 00	.....	22 50
19 Grey West	119	50 00	50 00	59 50
20 Haliburton	32	25 00	25 00	7 50
21 Haldimand	104	50 00	50 00	.....
22 Halton	123	50 00	50 00	43 50
23 Hastings Centre	104	50 00	50 00	20 00
24 Hastings North	48	25 00	25 00	10 75
25 Hastings South, and Belleville	129	50 00	28 27	31 25
26 Huron East	118	50 00	50 00	31 00
27 Huron West	115	100 00	50 00	28 75
28 Kenora	.....	50 00	.....	.....
29 Kent East	105	50 00	50 00	25 00
30 Kent West, and City of Chatham	144	.....	50 00	36 00
31 Lambton East	111	50 00	50 00	24 00
32 Lambton West	153	50 00	50 00	72 50
33 Lanark West, and Smith's Falls	112	50 00	50 00	28 00
34 Leeds East, and Brockville (No. 2)	110	.....	50 00	55 00
35 Leeds West (No. 1)	85	100 00	50 00	20 75
36 Leeds and Grenville (No. 3)	90	50 00	50 00	42 00
37 Lennox and Addington	109	.....	25 00	27 25
38 Lincoln	112	50 00	50 00	27 00
39 Manitoulin East	27	50 00	.....	27 00
40 Manitoulin West	31	50 00	.....	23 00
41 Middlesex East	132	50 00	50 00	31 00
42 Middlesex West	108	50 00	50 00	78 00
43 Muskoka	109	50 00	.....	47 00
44 Nipissing	87	50 00	.....	43 50
45 Norfolk	108	50 00	.....	50 50
46 Northumberland and Durham, No. 1	103	50 00	25 00	22 75
47 Northumberland and Durham, No. 2	102	50 00	25 00	20 00
48 Northumberland and Durham, No. 3	86	50 00	150 00	21 50
49 Ontario North	84	25 00	25 00	42 00

DIX L

INSTITUTES

STATEMENT

	Receipts—Continued		Expenditure				
	Balances and other sources	Total Receipts	Printing, Postage, etc.	Libraries, Educational Journals	Miscellaneous	Total Expenditure	Balances
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	198 19	319 19	18 60	32 80	98 42	149 82	169 37
2	54 79	115 79	10 17	2 40	36 15	48 72	67 07
3	134 99	264 99	16 75	76 52	44 00	137 27	127 72
4	593 72	693 72	425 73	18 25	37 96	481 94	211 78
5	414 97	541 47	28 30	71 11	180 25	279 66	261 81
6	28 32	198 82	19 62	50 00	83 55	153 17	45 65
7	42 81	226 06	13 80	43 82	90 45	148 07	77 99
8	115 08	215 08	36 00	37 50	65 05	138 55	76 53
9	74 48	231 48	29 46	20 00	112 25	161 71	69 77
10	240 62	366 37	11 40	89 93	115 25	216 58	149 79
11	123 52	244 77	18 25	124 57	23 05	165 87	78 90
12	72 15	147 15	7 30	.....	43 00	50 30	96 85
13	25 42	210 67	9 13	40 00	47 15	96 28	114 39
14	99 49	204 61	9 48	83 50	41 54	134 52	70 09
15	184 88	310 38	7 33	45 03	54 55	106 91	203 47
16	263 65	434 65	58 37	38 46	115 00	211 83	222 82
17	229 51	329 51	13 39	96 34	51 25	160 98	168 53
18	303 20	425 70	9 75	114 39	56 00	180 14	245 56
19	110 66	270 16	13 50	52 70	93 25	159 45	110 71
20	65 48	122 98	5 40	22 50	40 00	67 90	55 08
21	686 42	786 42	8 35	100 00	9 20	117 55	668 87
22	338 00	481 50	23 70	155 09	42 20	220 99	260 51
23	154 45	274 45	24 20	168 25	70 85	263 30	11 15
24	198 53	259 28	7 41	44 46	45 20	97 07	162 21
25	102 53	212 05	7 82	74 83	53 85	136 50	75 55
26	259 83	390 83	27 83	50 00	114 01	191 84	198 99
27	98 08	276 83	50 85	65 50	75 30	191 65	85 18
28	78 37	128 37	6 04	.....	36 45	42 49	85 88
29	379 47	504 47	10 20	.....	90 40	100 60	403 87
30	358 06	444 06	12 55	52 00	93 30	157 85	286 21
31	54 66	178 66	12 25	67 71	97 40	177 36	1 30
32	242 35	414 85	13 50	90 53	117 55	221 58	193 27
33	170 80	298 80	15 70	79 50	64 50	159 70	139 10
34	95 78	200 78	15 00	67 50	50 00	132 50	68 28
35	188 99	359 74	16 39	112 63	61 00	190 02	169 72
36	111 83	253 83	14 67	70 37	49 00	134 04	119 79
37	105 68	157 93	19 41	09 32	49 80	138 53	19 40
38	148 98	275 98	10 30	30 19	82 90	123 39	152 59
39	19 57	96 57	7 91	25 00	44 84	77 75	18 82
40	31 28	104 28	7 41	28 53	35 12	71 06	33 22
41	130 24	261 24	20 71	64 47	77 20	162 38	98 86
42	211 82	389 82	15 17	61 24	80 17	156 58	233 24
43	148 80	245 80	11 53	64 80	42 90	119 23	126 57
44	107 47	200 97	14 25	19 20	73 75	107 20	93 77
45	169 17	269 67	36 74	50 00	22 00	108 74	160 93
46	171 82	269 57	12 00	79 21	32 20	123 41	146 16
47	72 13	167 13	9 16	46 01	42 55	97 72	69 41
48	197 54	419 04	17 50	61 28	112 50	191 28	227 76
49	68 83	160 83	11 15	25 00	57 25	93 40	67 43

TEACHERS'
FINANCIAL

Name of Institute—Concluded	Total Registered Attendance of Members	Receipts		
		Government Grant	Municipal Grant	Members' Fees
		$ c.	$ c.	$ c.
50 Ontario South	108	50 00	50 00	48 60
51 Oxford	221	75 00	75 00	44 00
52 Parry Sound East	53	50 00	.....	12 75
53 Parry Sound West	65	50 00	.....	12 75
54 Peel	102	50 00	50 00	100 00
55 Perth and City of Stratford	207	75 00	75 00	94 50
56 Peterborough	120	50 00	50 00	52 50
57 Prescott and Russell	81	50 00	50 00	20 25
58 Prince Edward	101	50 00	50 00	23 25
59 Rainy River	72	50 00	.....	.....
60 Renfrew North	112	50 00	50 00	54 00
61 Renfrew South	140	50 00	50 00	36 35
62 Simcoe East	124	50 00	.....	.....
63 Simcoe North	119	50 00	.....	23 50
64 Simcoe South-West	112	100 00	50 00	25 75
65 Stormont	127	50 00	50 00	61 50
66 Sudbury	125	.....	.....	31 50
67 Thunder Bay	200	50 00	75 00	58 25
68 Timiskaming North	53	50 00	.....	26 50
69 Timiskaming South	111	100 00	.....	57 50
70 Victoria	159	50 00	50 00	72 50
71 Waterloo	308	100 00	100 00	187 00
72 Welland	203	100 00	100 00	42 50
73 Wellington North	85	100 00	50 00	18 25
74 Wellington South	141	50 00	50 00	.....
75 Wentworth	134 00	50 00	50 00	59 00
76 York East	136	50 00	100 00	33 75
77 York North	92	50 00	100 00	45 50
78 York West	148	50 00	100 00	38 00
79*Ontario Educational Association	963	1,400 00	.....	385 20
Cities				
80 Brantford	92	25 00	50 00	50 00
81 Guelph	.....	25 00	25 00	.....
82 Hamilton	354	100 00	125 00	204 50
83 Kingston	63	25 00	25 00	16 25
84 London	274	75 00	75 00	124 00
85 Ottawa	393	100 00	100 00	169 50
86 Peterborough	104	50 00	25 00	52 00
87 St. Catharines and Niagara Falls	95	50 00	50 00	17 25
88 Toronto, District No. 1	263	75 00	75 00	128 75
89 " " " 2	216	75 00	75 00	62 75
90 " " " 3	241	75 00	75 00	55 75
91 " " " 4	243	75 00	75 00	.....
92 " " " 5	228	75 00	75 00	58 00
93 " " " 6	253	75 00	75 00	61 50
94 " " " 7	232	75 00	75 00	65 00
95 Windsor and Walkerville	131	50 00	50 00	89 75
Totals, 1919	12,767	6,475 00	4,405 89	4,368 55
Totals, 1918	8,869	6,725 00	4,202 30	3,635 17
Increases	3,898	.....	203 59	733 38
Decreases	.....	250 00	.....	.....

* Statement for 1919-1920.

INSTITUTES—Concluded

STATEMENT—Concluded

	Receipts—Concluded		Expenditure				
	Balances and other sources	Total Receipts	Printing, Postage, etc.	Libraries, Educational Journals	Miscellaneous	Total Expenditure	Balances
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
50	181 09	329 09	13 91	76 00	83 00	172 91	156 18
51	203 98	397 98	16 57	125 70	121 38	263 65	134 33
52	89 88	152 63	9 95	25	10 00	20 20	132 43
53	87 15	149 90	52 65	26 89	15 00	94 54	55 36
54	133 11	333 11	23 63	108 74	136 25	268 62	64 49
55	340 80	585 30	20 31	167 48	275 80	463 59	121 71
56	86 36	238 86	32 51	97 00	48 15	177 66	61 20
57	425 94	546 19	49 41	24 25	64 63	138 29	407 90
58	133 39	256 64	17 22	40 99	82 17	140 38	116 26
59	174 10	224 10	8 50	22 26	103 13	133 89	90 21
60	104 76	258 76	20 55	36 30	60 00	116 85	141 91
61	113 41	249 76	7 95	82 97	26 65	117 57	132 19
62	151 96	201 96	8 75	.....	58 50	67 25	134 71
63	192 93	266 43	16 00	80 00	72 45	168 45	97 98
64	141 46	317 21	8 80	152 12	53 30	214 22	102 99
65	56 49	217 99	11 15	97 58	69 35	178 08	39 91
66	73 66	105 16	9 75	25 00	2 00	36 75	68 41
67	175 75	359 00	35 23	61 08	70 00	166 31	192 69
68	29 06	105 56	24 26	32 24	37 95	94 45	11 11
69	93 47	250 97	18 09	50 00	98 25	166 34	84 63
70	160 12	332 62	29 64	36 50	84 00	150 14	182 48
71	202 33	589 33	34 87	90 49	199 82	325 18	264 15
72	263 33	505 83	13 32	75 69	150 26	239 27	266 56
73	138 07	306 32	26 39	85 41	114 53	226 33	79 99
74	282 07	382 07	11 28	.....	87 52	98 80	283 27
75	115 09	274 09	27 50	108 42	95 30	231 22	42 87
76	297 61	481 36	80 15	125 95	55 66	261 76	219 60
77	254 38	449 88	59 05	111 59	45 02	215 66	234 22
78	339 97	527 97	95 65	101 24	85 05	281 94	246 03
79	1,663 46	3,448 66	851 02	....	735 15	1,586 17	1,862 49
80	33 36	158 36	1 60	57 38	37 16	96 14	62 22
81	71 26	121 26	3 02	38 72	20 00	61 74	59 52
82	359 52	789 02	23 21	323 04	171 27	517 52	271 50
83	98 46	164 71	12 75	35 62	103 00	151 37	13 34
84	115 18	389 18	29 85	75 00	112 50	217 35	171 83
85	194 27	563 77	94 45	130 00	338 60	563 05	72
86	74 74	201 74	9 55	65 80	60 05	135 40	66 34
87	126 26	243 51	9 21	97 10	56 19	162 50	81 01
88	259 96	538 71	29 27	487 44	22 00	538 71	.....
89	271 29	484 04	36 13	.....	447 91	484 04	.....
90	254 32	460 07	18 29	222 00	100 00	340 29	119 78
91	391 53	541 53	31 81	211 80	237 68	481 29	60 24
92	242 36	450 36	36 36	240 00	88 50	364 86	85 50
93	292 36	503 86	66 51	313 59	60 00	440 10	63 76
94	394 86	609 86	84 16	196 75	328 95	609 86	.....
95	23 30	213 05	15 70	4 91	75 00	95 61	117 44
	18,385 62	33,635 06	3,357 36	7,423 73	8,650 59	19,431 68	14,203 38
	16,168 95	30,731 42	1,837 11	5,324 82	8,377 33	15,539 26	15,192 16
	2,216 67	2,903 64	1,520 25	2,098 91	273 26	3,892 42	.....
	.....	.....	.....	.....	.....	.....	988 78

APPEN-

FIFTH CLASSES.

Inspectorate		Name of School (In the case of rural schools the section number and the name of the township are given.)		Post Office
Algoma	1	1	McDonald	Echo Bay
Brant and N. Norfolk (in part)	2	8	Burford	Burford
	3	11	Windham	Vanessa, R.R. 2
Bruce, West	4		Tiverton	Tiverton
Dundas	5	6	Mountain	Inkerman
	6	4	Winchester	Winchester, R.R. 1
Elgin, West	7	10	Dunwich	Campbellton
Essex	8		Kingsville	Kingsville
	9	2	Pelee Island	Pelee Island
Grey, East	10	U12	Artemesia & Glenelg	Priceville
	11	3	Euphrasia	Kimberley
Grey, South	12		Neustadt	Neustadt
Grey, West	13		Shallow Lake	Shallow Lake
Haldimand	14	U3	Walpole & Rainham	Selkirk
Haliburton	15	1	Anson	Minden
Halton and Wentworth (in part)	16	U9 & 14	W. Flamboro' and Beverly	Dundas, R.R. 4
Hastings, Centre	17		Marmora	Marmora
Huron, East	18	7	Howick	Gorrie
	19	17	Howick	Fordwich
Huron, West	20		Hensall	Hensall
	21	8	Ashfield	Dungannon
	22	7	Hay	Zurich
	23	5	Stephen	Crediton
	24	16	Stephen	Dashwood
	25	6	Usborne	Woodland, R.R. 1
	26	4	West Wawanosh	Lucknow, R.R. 1
	27		Bayfield	Bayfield
	28	3	Ashfield	Lucknow, R.R. 7
Kenora, Thunder Bay East and Algoma (in part)	29	1	Schreiber	Schreiber
	30		Sioux Lookout	Sioux Lookout
	31	1	White River	White River
Kent, West	32	9	Chatham	Tupperville
	33		Wheatley	Wheatley

DIX M

1919-1920

Name of Principal and Degree	Teachers: Professional Certificate	Teachers: Annual Salary, 1920	Pupils: No. of Pupils	Pupils: Average Daily Attendance	Grade of Fifth Class: A	Grade of Fifth Class: B	Grade of Fifth Class: C	Total Value of Approved Equipment	Legislative Grant
		$						$ c.	$ c.
1 Annie W. McIntosh	I	900	9	7	....	1	....	279 68	235 92
2 John A. Henry	II	1,300	5	3	1	....	....	666 83	158 92
3 Revah E. Miller	II	675	2	2	....	1	....	124 52	59 95
4 Maude B. Alexander	II	795	3	2	....	1	....	304 89	128 89
5 Leta A. Connell	II	800	5	3	....	1	....	253 71	90 02
6 Jessie Sutherland	I	750	8	5	1	....	....	342 75	121 05
7 Mary Leitch	II	725	2	2	....	....	1	173 75	59 87
8 W. J. Elliott	I	1,600	8	5	1	....	....	365 49	201 54
9 R. E. Patterson	I	1,100	7	2	....	....	1	188 23	73 82
10 Annie Harrow	II	800	6	4	....	1	....	205 20	75 52
11 Katherine M. Faulkner	I	750	3	2	....	1	....	252 00	95 20
12 H. M. Ermel	II	1,100	7	6	....	1	....	208 82	120 88
13 Russel Taylor	II	1,300	3	2	....	....	1	170 70	107 07
14 Jessie Kelso	I	1,000	9	5	1	....	....	595 00	127 00
15 L. E. R. Stephens	II	1,000	12	6	....	1	....	89 49	73 94
16 Meryol E. Logan	I	825	4	3	....	1	....	235 56	113 55
17 Charles S. Haig	II	1,300	24	18	1	....	....	245 22	164 53
18 Shirley Muir	I	1,000	3	2	....	1	....	219 82	111 98
19 Geo. H. Jefferson	II	1,050	8	7	....	1	....	263 59	91 35
20 Wm. Mackay	II	1,200	5	3	1	....	....	270 80	167 08
21 Frederick Ross	II	950	6	3	1	....	....	224 58	132 45
22 Nelson E. Dahms	II	1,200	18	11	1	....	....	312 00	141 20
23 Marcus C. Roszell, B.A.	II	1,200	15	13	1	....	....	439 00	177 50
24 Geo. S. Howard	II	1,250	8	5	1	....	....	348 00	144 70
25 Mae J. Ready	II	1,000	8	5	1	....	....	204 00	130 40
26 Verna J. McLaughlin	I	850	10	8	1	....	....	205 00	139 25
27 Elizabeth Fair	I	800	8	6	....	1	....	227 00	122 70
28 Anna Mackenzie	II	750	2	2	....	....	1	235 00	73 50
29 George A. Evans	III	2,000	12	9	1	....	....	261 54	272 30
30 E. B. Howard	II	1,200	8	6	....	1	....	162 42	231 98
31 Charles W. Ullrich	II	1,200	2	2	....	....	1	318 95	172 50
32 Reginald Patterson	I	800	7	4	....	1	....	261 47	87 28
33 Jessie L. Linklater	I	950	8	5	1	....	....	420 70	201 57

FIFTH CLASSES,

Inspectorate		Name of School (In the case of rural schools, the section number and the name of the township are given)	Post Office
Lambton, East	34	1 Euphemia	Florence, R. R. 2
	35	5 Euphemia	Florence
	36	10 Euphemia	Bothwell, R. R. 5
	37	1 Dawn	Tupperville, R. R. 2
	38	11 Dawn	Tupperville, R. R. 2
	39	20 Dawn	Croton, R. R. 1
Lambton, West	40	Courtright	Courtright
	41	11 Moore	Brigden
Lincoln	42	U 3 Louth	Vineland
Manitoulin	43	1 Carnarvon	Mindemoya
Muskoka, South and West	44	Bala	Bala
	45	Port Carling	Port Carling
Northumberland and Durham, No. 3	46	U 16 & 18 Murray & Brighton	Wooler
Ontario, South	47	4 Pickering (West)	Pickering
Ontario, North	48	13 Brock	Sunderland
	49	5 Scott	Zephyr
	50	7 Uxbridge	Goodwood
Oxford, South	51	12 Dereham	Brownsville
Oxford, North	52	U 5 & 1 E. Nissouri & N. Oxford	Thamesford
	53	10 East Zorra	Innerkip
	54	Embro	Embro
Parry Sound, South	55	Magnetawan	Magnetawan
	56	7 Humphrey	Rosseau
	57	1 McKellar	McKellar
	58	1 McMurrich	Sprucedale
Parry Sound East	59	U 4 North Himsworth	Callander
	60	1 Nipissing	Nipissing
	61	Kearney	Kearney
	62	South River	South River
	63	Sundridge	Sundridge
Peel	64	Bolton	Bolton
Perth, North	65	10 Elma	Atwood
	66	U 6 Logan and Elma	Monkton
Prescott and Russell	67	2 Cumberland	Vars
	68	5 Cumberland	Cumberland
	69	U 10 & 3 Plantagenet N. & S.	Pendleton
	70	1 Plantagenet South	Riceville
	71	L'Orignal	L'Orignal
Rainy River	72	Rainy River	Rainy River
	73	5 Lash	Emo
Renfrew, North	74	6 Ross	Forester's Falls

1919-1920—Continued

Teachers			Pupils		Grade of Fifth Class			Total Value of Approved Equipment	Legislative Grant
Name of Principal and Degree	Professional Certificate	Annual Salary, 1920	No. of Pupils	Average Daily Attendance	A	B	C		
		$						$ c	$ c.
34 Flossie Hains	I	800	6	5	....	....	1	181 05	98 10
35 Joy Corneil	I	800	15	14	1	....	....	235 88	123 58
36 Valetta Pearson	II	700	2	2	....	....	1	80 00	49 56
37 Edith J. Hatton	II	725	2	2	....	....	1	105 28	63 62
38 Mrs. W. Campbell	II	650	2	2	....	....	1	52 12	42 71
39 Ethel Booth	II	800	3	2	....	....	1	121 14	67 11
40 John H. Young	II	900	4	4	....	1	....	224 01	122 40
41 W. E. Jarrott	II	1,100	11	9	1	....	....	422 97	146 83
42 Geo. W. Clark	II	1,200	5	3	....	1	....	528 11	109 16
43 D. D. MacMillan	I	1,000	5	4	....	1	....	135 68	157 12
44 W. J. Robertson	II	1,100	6	4	....	1	....	62 22	212 44
45 Annie Douglas	II	950	5	3	....	1	....	115 59	223 10
46 Neta M. Ellis	I	800	9	9	....	1	....	298 91	94 84
47 W. A Henderson	II	950	6	5	1	....	....	298 19	139 81
48 D. Bruce Harvey	I	950	4	3	....	1	....	212 16	111 21
49 J. W. Rynard	II	1,000	5	4	....	1	....	211 03	86 10
50 Lillian Dowswell	II	750	3	2	1	....	....	178 43	92 84
51 Mabel Boyce	II	900	7	4	1	....	....	409 87	144 42
52 J. M. Hinchley	I	1,400	8	5	1	....	....	293 43	164 34
53 Elizabeth McCorquodale	I	900	3	2	....	1	....	364 26	126 42
54 Reuben Ardiell	II	1,100	2	2	....	1	....	443 53	139 76
55 Godfrey Grunig	II	1,250	7	5	....	1	....	347 09	199 40
56 Clarence Kerr	I	1,000	2	2	....	1	....	209 11	221 82
57 William E. White	II	800	6	2	1	....	....	247 99	249 58
58 Annie Card	I	1,000	10	7	....	1	....	211 05	222 20
59 Duane Wilson	II	950	6	5	1	....	....	256 21	271 24
60 Lewis Armstrong	I	1,160	11	9	....	1	....	280 63	236 12
61 Mrs. M. Dipsam	II	900	5	3	....	1	....	325 00	265 00
62 Leo W. Wilberforce	II	1,200	6	3	1	....	....	287 00	337 40
63 J. R. Teasdale	II	900	12	8	1	....	....	283 00	336 60
64 Alfred C. Fowler	I	1,100	10	8	....	1	....	302 10	129 21
65 Thomas G. Ratcliffe	II	1,000	4	3	....	1	....	125 54	77 55
66 Garnet C. Francis	I	900	8	4	....	1	....	209 69	85 96
67 May I. McPherson	I	850	5	3	1	....	....	268 98	124 44
68 Clarence H. Hand	I	1,000	14	10	1	....	....	224 88	132 48
69 Mary Watson	II	750	4	2	....	1	....	142 99	79 29
70 Mary C. Foran	II	800	4	2	....	1	....	206 12	85 60
71 Sr. St. Armand (Florida Rauzon)	II	800	4	3	1	....	....	219 65	139 46
72 Miss L. B. Rabb	I	1,100	17	12	1	....	....	408 99	351 10
73 Anna M. Whelan	I	1,100	5	4	1	....	....	241 74	318 34
74 May B. Jackson	I	1,000	10	6	....	....	1	317 83	86 78

FIFTH CLASSES

Inspectorate		Name of School (In the case of rural schools the section number and the name of the township are given)	Post Office
Simcoe, East	75	Victoria Harbour	Victoria Harbour
Simcoe, North	76	6 Flos	Phelpston
	77	3 Flos	Duntroon
Sudbury (in part) and North Nipissing	78	1 Creighton and Snider	Creighton Mine
Victoria, East	79	3 Somerville	Kinmount
Victoria, West	80	8 Mariposa	Little Britain
	81	12 Mariposa	Oakwood
	82	Woodville	Woodville
Welland, South	83	9 Bertie	Stevensville
Wellington, South	84	6 Erin	Hillsburgh
Wentworth	85	3 Binbrook	Binbrook
	86 U	7 Flamboro, West & East	Millgrove
	87	3 Saltfleet	Stony Creek
York, North	88	23 King	King
	89	9 Georgina	Pefferlaw
	90	19 King	Nobleton
York, West	91	Mimico	Mimico
	92	Woodbridge	Woodbridge
	93	22 York	Swansea
R. C. Separate Schools—			
Inspector Bennett	94	7 Bromley	Douglas
	95	Killaloe	Killaloe
	96	Mattawa	Mattawa
Inspector Finn	97	1 Brougham	Ashdad, R.R. 1
	98	2 North Burgess	Stanleyville
Inspector Jones	99	10 Lancaster	Dalhousie Sta., P.Q.
	100	15 Charlottenburgh	St. Raphael West
	101	16 Cornwall	St. Andrews West
Inspector Lee	102	2 Ashfield	Goderich, R.R. 3
	103	6 Ellice	Sebringville, R.R. 1
	104	2 Hibbert	Dublin
	105	Mildmay	Mildmay
Inspector Walsh	106	7 East Hawkesbury	St. Eugene

1919-1920—Concluded

Teachers			Pupils		Grade of Fifth Class				
Name of Principal and Degree	Professional Certificate	Annual Salary, 1920	No. of Pupils	Average Daily Attendance	A	B	C	Total Value of Approved Equipment	Legislative Grant
		$						$ c.	$ c.
75 Clare R. Fallis	I	1,200	13	6	1	....	....	226 18	162 61
76 John H. Hall	II	1,200	2	2	....	....	1	204 50	75 45
77 Polina White	II	800	7	6	....	1	....	202 50	85 25
78 Irene M. MacGregor	I	1,500	12	11	1	....	....	177 75	304 96
79 A. J. Fred. McEwen	II	1,000	5	3	....	1	....	158 99	80 89
80 Chas. H. Lapp	II	1,050	5	4	....	1	....	208 06	85 80
81 Lloyd S. Mosure	II	975	4	2	....	1	....	200 17	85 01
82 G. B. Rennie	II	900	5	3	....	1	....	213 44	121 34
83 Irene F. Foster	I	1,100	12	8	....	1	....	311 43	121 14
84 Ross R. McKay	II	975	5	3	....	1	....	221 83	87 18
85 Harriet G. Switzer	II	950	2	2	....	1	....	204 77	85 47
86 John A. Dalton	II	1,100	5	4	....	1	....	208 85	85 88
87 R. Lloyd Hyslop	II	1,300	3	2	1	....	....	257 93	135 79
88 Walter Rolling	II	900	8	6	....	....	1	230 85	78 08
89 M. Isabelle Nickle	I	900	9	7	....	1	....	221 21	112 12
90 E. Lillian Morley	II	900	3	2	....	1	....	213 00	86 30
91 John W. English, B.A.	I	2,800	31	18	1	....	....	352 38	200 03
92 George W. Shore	II	1,200	9	6	1	....	....	333 12	173 31
93 John A. Short	I	2,100	7	5	1	....	....	95 89	144 58
94 Sr. M. Helen	I	800	34	29	1	....	....	513 60	492 80
95 Sr. M. Nativity	I	600	20	17	1	....	....	230 09	220 50
96 Sr. St. André Corsini	II	700	12	10	1	....	....	437 74	1,034 81
97 Sr. M. Beatrice	II	600	15	13	1	....	....	254 76	264 14
98 Mary P. Dillon	II	625	5	4	....	1	....	92 00	176 58
99 Sr. M. Jerome, B.A.	I	800	50	40	1	....	....	1,104 69	525 00
100 Sr. M. Florina	I	600	23	19	1	....	....	716 60	402 36
101 Sr. Camilla	II	700	8	6	1	....	....	520 98	379 61
102 Sr. M. Divine Heart	II	800	8	6	1	....	....	443 26	470 96
103 Sr M Sebastian	II	860	8	5	1	....	....	563 99	471 00
104 M. M. Delores	I	1,200	38	33	1	....	....	526 86	532 14
105 Sr. M. Petranda	P.U.	700	10	7	1	....	....	223 85	380 20
106 Sr. Frances Xavier	II	700	9	8	1	....	....	330 00	235 90
Totals, 1919-1920	.....	*997	895	656	47	46	13	29,366 43	†18,767 64
Totals, 1918-1919	.....	*841	962	685	48	44	15	29,315 29	12,876 97
Increases	.....	156	.....	.....	....	2	....	51 14	5,890 67
Decreases	.....	.....	67	29	1	....	2	.....	.....

* Average salary.

† In addition there was paid on equipment, the sum of $225.71 to schools that did not qualify as Fifth Classes in 1919-1920.

APPENDIX N

RURAL SCHOOL LIBRARIES, OCT. 1st, 1919, TO OCT. 1st, 1920

Inspectorate	No. of schools purchasing books to the amount of $10.00 during the year	Total amount expended by such schools during the year for books recommended	Total Government grant	No. of rural public school libraries in inspectorate	No. of libraries established during year
		$ c.	$ c.		
Algoma	8	190 78	64 02	41	.....
Brant, and Norfolk in part	13	193 44	95 71	77	.....
Bruce, East	14	189 51	96 37	85	.....
Bruce, West	36	526 97	275 45	83	.....
Carleton East	11	140 66	73 07	84	.....
Carleton West and Lanark East	11	148 63	76 86	82	.....
Dufferin	17	300 34	128 20	92	.....
Dundas	33	433 88	215 94	74	.....
Elgin, East	23	275 26	150 47	75	.....
Elgin, West	2	20 00	11 00	29	.....
Essex	19	337 37	153 87	97	.....
Essex, North in part	7	72 10	39 65	15	.....
Frontenac, North, and Addington	22	243 35	133 84	79	.....
Frontenac, South	13	183 07	92 83	95	.....
Glengarry	7	79 81	43 90	75	.....
Grey, East	6	100 20	47 62	82	.....
Grey, South	7	145 10	60 74	66	.....
Grey, West	7	84 10	44 38	71	.....
Haldimand	30	391 35	199 67	74	.....
Haliburton	1	17 00	9 35	49	.....
Halton, and Wentworth in part	14	197 58	106 36	69	.....
Hastings, Centre	6	82 90	40 74	72	.....
Hastings, North	16	181 18	96 75	56	.....
Hastings, South	17	231 10	113 85	51	.....
Huron, East	24	292 40	156 82	84	.....
Huron, West	6	69 70	38 34	99	.....
Kenora, Thunder Bay East and Algoma in part	4	86 81	40 00	21	.....
Kent, East	31	458 40	237 23	69	.....
Kent, West	28	373 39	187 80	63	1
Lambton, East	8	95 06	52 28	87	.....
Lambton, West	14	175 06	92 30	86	.....
Lanark, West	11	144 75	75 87	70	.....
Leeds and Grenville, No. 1	14	155 84	84 71	75	.....
Leeds and Grenville, No. 2	40	468 38	253 30	70	.....
Leeds and Grenville, No. 3	.....	.....	.....	75	.....
Lennox	5	114 92	41 75	82	.....
Lincoln	23	387 48	194 89	65	.....
Manitoulin, etc	11	125 50	69 01	52	1
Middlesex, East	19	219 95	120 96	102	.....
Middlesex, West	12	149 76	79 17	81	.....
Muskoka, South and West	12	141 95	78 08	83	.....
Norfolk	8	110 05	56 62	82	.....
Northumberland and Durham, No 1.	23	342 00	170 92	63	.....
Northumberland and Durham, No. 2.	9	102 19	56 21	73	.....
Northumberland and Durham, No. 3.	4	73 98	30 53	65	.....
Ontario, North	19	316 21	151 73	75	1
Ontario, South	.....	.....	.....	65	.....
Oxford, North	23	327 79	163.49	58	.....
Oxford, South	8	105 94	57 14	48	.....
Parry Sound East, Muskoka North and South Nipissing	4	109 03	34 59	75	.....
Parry Sound, South West	2	20 88	11 48	68	.....
Peel	11	142 11	78 15	72	.....
Perth, North	9	98 93	54 41	68	.....
Perth, South	8	114 40	57 25	44	.....

RURAL SCHOOL LIBRARIES, OCT. 1st, 1919, TO OCT. 1st, 1920.—Concluded

Inspectorate	No. of schools purchasing books to the amount of $10.00 during the year	Total amount expended by such schools during the year for books recommended	Total Government grant	No. of rural public school libraries in inspectorate	No. of libraries established during year
		$ c.	$ c.		
Peterborough, East	11	119 50	65 73	71	.....
Peterborough, West, and Victoria, E.	8	108 65	57 76	58	.....
Prescott and Russell	18	207 89	113 82	82	.....
Prince Edward	32	365 33	196 19	76	.....
Rainy River	.....	.....	.....	47	.....
Renfrew, North	4	69 18	31 55	74	.....
Renfrew, South	7	83 87	46 14	81	.....
Simcoe, East	23	486 62	212 12	58	.....
Simcoe, North	15	172 45	94 86	58	.....
Simcoe, South West	9	141 60	72 00	89	.....
Stormont	6	112 12	50 44	75	1
Sudbury, and Nipissing in part	13	282 87	100 98	40	.....
Thunder Bay, West	3	35 00	19 25	36	.....
Timiskaming, North and Algoma N.	6	107 42	52 11	79	.....
Timiskaming, South and Nipissing in part	.....	.....	.....	35	.....
Victoria, West	26	297 05	163 40	72	.....
Waterloo, North	16	228 64	106 93	40	.....
Waterloo, South	11	165 06	83 05	42	.....
Welland, North	7	107 75	48 46	35	.....
Welland, South	10	116 68	64 18	43	.....
Wellington, North	14	301 52	115 11	65	.....
Wellington, South	21	331 50	158 02	68	.....
Wentworth	35	438 43	232 60	66	1
York, East	18	351 53	131 59	53	.....
York, North	55	722 25	383 98	68	.....
York, West	13	196 66	96 23	44	.....
R. C. Separate Schools:					
Inspector Bennett	12	135 49	98 93	21	3
" Finn	22	323 13	182 77	48	.....
" Jones	7	189 93	59 81	18	2
" Lee	29	380 18	254 86	43	.....
" Power	.....	.....	.....	1	.....
" Sullivan	4	48 10	35 11	19	.....
" Walsh	4	55 25	34 90	14	.....
Totals, 1919-1920	1,189	16,770 19	8,458 55	5,512	10
Totals, 1918-1919	1,168	16,159 42	8,219 57	5,514	34
Increases	21	610 77	238 98	.....	.....
Decreases	.....	.....	.....	2	24

APPENDIX O

CADET CORPS, 1920

Collegiate Institutes, High, Public and Separate Schools having Cadet Corps with at least twenty members between the ages of 12 and 18 years in the case of Public and Separate Schools, and between 16 and 18 years in other cases.

Collegiate Institutes: Barrie, Brantford, Brockville, Chatham, Clinton, Fort William, Galt, Goderich, Guelph, Hamilton, Ingersoll, Kingston, London, Lindsay, Napanee, Niagara Falls, North Bay, Orillia, Ottawa (2), Owen Sound, Perth, Peterborough, Picton, Renfrew, St. Catharines, St. Thomas, Sarnia, Seaforth, Smith's Falls, Strathroy, Toronto (Harbord, Humberside, Jarvis, Malvern, Oakwood, Parkdale, Riverdale), Windsor and Woodstock. Total 40.

High Schools: Almonte, Athens, Belleville, Brampton, Caledonia, Cornwall, Dutton, Essex, Fergus, Gananoque, Iroquois, Kenora, Kincardine, Leamington, Listowel, Markdale, Meaford, Mount Forest, Niagara Falls South, Oshawa, Paris, Port Hope, Prescott, Tillsonburg, Toronto (Commerce and North), Trenton, Uxbridge, Walkerton, Wallaceburg, Welland, Winchester. Total 32.

Public Schools: No. 5 Ancaster, Arthur, Aylmer, Belleville (3), Bridgeburg, Brockville, Chatham (3), Dundas, Fort Frances, Guelph (2), Hamilton (18), Iroquois Falls, Keewatin, Kenora, Kingston (2), Kitchener, Lakefield, London (4), Millbrook, Niagara Falls, Orangeville, Ottawa (9), Paris, Peterborough (4), Port Arthur (5), Port Hope, St. Thomas (5), Sault Ste. Marie, Stratford (3), Sudbury, and Toronto (60). Total, 137.

R. C. Separate Schools: Hamilton, Kingston and Toronto (20). Total, 22.

Total number of Cadet Corps, 231.

APPENDIX P

SUPERANNUATED TEACHERS

(Ryerson Superannuation Scheme)

*** Allowance Granted during 1920**

Regis. No.	Name	Age	Post Office	Years of Service	Allowance
					$ c.
1269...	McDonald, Robt.....	60	Almonte.....	31	474 50

Summary for Years 1882-1920

Year	Number of Teachers on List	Expenditure for the Year	Gross Contributions to the Fund	Amount Refunded to Teachers or to the Estates of Teachers
		$ c.	$ c.	$ c.
1882.....	422	51,000 00	13,501 08	3,660 10
1887.....	454	58,295 33	1,489 00	3,815 80
1892.....	456	63,750 00	1,313 50	786 86
1897.	424	62,800 33	847 00	620 27
1902....	407	64,244 92	1,073 50	722 78
1907.....	375	63,018 55	766 00	764 54
1912.....	297	†52,696 90	†504 65	†443 01
1917.....	245	†48,232 00	†353 60	†810 92
1919.....	204	†40,697 50	†9 00	†503 90
1920.....	196	†65,957 20	†14 00	†107 76

Four teachers' subscriptions were withdrawn from the fund during the year ending 31st October, 1920.

The annual allowance to each Superannuated Teacher was increased by the Legislature in 1920. Payments are at the rate of $11 per year of service instead of at $6 as formerly.

* As the sum of $4 is deducted from each Superannuated Teacher's allowance as subscription to the fund, the payment was $4 less than the amount stated.

†For fiscal year ending 31st October.

APPENDIX Q

FINANCIAL STATEMENT OF THE FACULTIES OF EDUCATION

I.—UNIVERSITY OF TORONTO FACULTY OF EDUCATION

Financial Statement for the Year Ended 30th June, 1920

Receipts

Provincial Grant:		
Received on account thereof during financial year	$6,000 00	
Balance for 1919-20 still due on 30th June	9,000 00	
		$15,000 00
Fees:		
Teachers in training	$7,980 00	
Pupils in University Schools	25,072 00	
		33,052 00
		$48,052 00

Expenditures

1. *Salaries.*	Payment to Officer.	Superannuation reservations
Professors, each 12 mos. to 30th June:		
W. Pakenham, History and Science of Education (also Dean of the Faculty) at $5,000	$4,875 00	$125 00
H. J. Crawford, Methods in Classics, also Headmaster of University Schools at $4,350	4,241 25	108 75
P. Sandiford, Associate Professor, 12 mos. to 30th June, at $4,000	3,900 00	100 00
Assistant Professors in Methods, also Chief Instructors, University Schools, 12 mos. to 30th June:		
G. A. Cornish, Science, at $3,500	3,412 50	87 50
J. T. Crawford, Mathematics, at $3,500	3,412 50	87 50
G. M. Jones, English, at $3,500	3,412 50	87 50
W. C. Ferguson, French and German, at $3,350	3,266 25	83 75
F. E. Coombs, Elementary Subjects, at $3,350	3,266 25	83 75
S. W. Perry, Lecturer in Methods, also Chief Instructor University Schools, Art and Commercial Work, 12 mos. to 30th June, at $3,100	3,022 50	77 50
Lecturers in Faculty of Education:		
W. J. Dunlop, Elementary Subjects, 12 mos. to 30th June, at $2,850	2,778 75	71 25
Mrs. Muriel Sinclair (Sessional), 9 mos. at $260	2,281 50	58 50
Instructors in Faculty and Assistant Instructors, University Schools, each 12 mos. to 30th June:		
A. N. Scarrow, Manual Training, at $2,850	2,778 75	71 25
G. N. Bramfitt, Physical Training, at $2,600	2,535 00	65 00
Special Instructors in Faculty (Sessional):		
A. T. Cringan, Music, at $600	585 00	15 00
Miss A. E. Robertson	100 00	.....
Miss E. Park, Foods and House Management (paid also in Household Science)	100 00	.....
Mrs. Mary Halbus, Reading and Dramatics, at $500	487 50	12 50
Assistant Instructors, University Schools, each 12 mos. to 30th June:		
T. M. Porter, at $3,100	3,022 50	77 50
H. A. Grainger, at $3,100 (paid also in Special Courses for Returned Men)	3,022 50	77 50
J. A. Irwin, at $3,000	2,925 00	75 00
J. O. Carlisle, at $2,850	2,778 75	71 25
J. G. Workman, at $2,850	2,778 75	71 25
G. A. Cline, at $2,600 (paid also in Special Courses for Returned Men)	2,535 00	65 00
W. L. C. Richardson, at $2,600	2,535 00	65 00
H. B. Kilgour, at $2,000	1,950 00	50 00
N. L. Murch, at $2,500	2,437 50	62 50
D. E. Hamilton, at $2,500	2,437 50	62 50
E. L. Daniher, at $2,250	2,193 75	56 25
W. H. Williams, at $3,000	2,925 00	75 00
W. J. Lougheed, at $3,100 (paid also in Mathematics)	3,022 50	77 50

Assistant Instructors (Sessional) each salary for 10 teaching months at $210 per month:		
Frank Halbus	$2,047 50	$52 50
David H. Axon	2,047 50	52 50
H. G. Manning, Assistant Instructor, at $2,600 per annum, 1 month to 31st July (resigned), $216.66, less charged to Special Courses for Returned Men, $108.33	105 62	2 71
Supply Teachers at $4 per half day:		
P. Daniels, 16 half days	64 00	.....
C. R. Ashdown, 6 half days	24 00	.....
Miss H. Hoffman, 4 half days	16 00	.....
R. A. Stewart, 3 half days	12 00	.....
S. A. Watson, 2 half days	8 00	.....
L. M. Keith, 1 half day	4 00	.....
W. A. Kenyon, 7 days at $6, $42; 4 half days at $4, $16	58 00	.....
Miss L. Swinarton, Secretary, Dean's Office, 12 mos. to 30th June	1,100 00	.....
Miss Gladys Cotter, Clerk and Librarian, 12 mos. to 30th June	950 00	.....
Clerk in Headmaster's Office at $950 per annum:		
Mrs. Katherine E. Freeland, 9½ mos. to 15th April (resigned)	752 10	.....
Miss Emily Fraser, 15th April to 30th June	197 90	.....
	$86,405 62	$2,128 71
		86,405 62
		$88,534 33

2. Education Building and Department.

(*a*) Maintenance of building:		
Fuel	$2,330 50	
Light	667 36	
Water	365 48	
Caretaker's supplies	399 73	
Cleaning	2,042 52	
Repairs and renewals	1,080 20	
Engineer and caretaker, S. Hunter, 12 mos. to 30th June	1,400 00	
Firemen:		
W. Odd, 13 hrs. at 45c.	5 85	
C. Fly, 5 mos., 13 days at $75 per mo.	412 50	
		$8,704 14
(*b*) Maintenance of Annex:		
Fuel	285 78	
Light	107 86	
Water	24 50	
Caretaker's supplies	59 25	
Cleaning	269 00	
Repairs and renewals	278 37	
		1,024 76
(*c*) Maintenance of Department:		
Use of city and rural schools, Board of Education, City of Toronto, practice-teaching privileges under agreement	$7,775 00	
Public School Trustees, Newtonbrook, do	150 00	
Office expenses, printing, postage, class-room supplies and apparatus, and sundries	4,393 90	
Laboratory assistance	100 98	
Messenger service	397 58	
		12,817 46
		$111,080 69

NOTE.—In the above statement no charge has been made upon the Faculty of Education for any portion of the general expenses of University administration, such as Library, Examinations, etc.

Certified correct,

F. J. MOURÉ, *Bursar.*

Toronto, 24th December, 1920.

II. UNIVERSITY OF QUEEN'S COLLEGE FACULTY OF EDUCATION

Financial Statement, January 1st to October 15th, 1920

Receipts

Ontario Government	$6,000 00
Fees	92 00
Overdraft	16,783 29
Total	$22,875 29

Expenditures

Overdraft, 1919		$11.490 27	
Salaries:			
Dean Coleman	$3,333 32		
W. E. Macpherson	2,250 00		
R. M. Filson	150 00		
W. T. Connell	50 00		
R. K. Hicks	200 00		
W. T. MacClement	200 00		
A. B. Klugh	100 00		
J. Matheson	200 00		
Willa Atkins	340 00		
Total		6,823 32	
Board of Education		3.975 00	
Travelling expenses:			
Dean Coleman		61 00	
Printing and Stationery:			
Oxford University Press	$54 00		
W. H. Wormwith	40 00		
Jackson Press	33 95		
Guild & Hanson	3 75		
R. Uglow & Co.	37 88		
Renouf Publishing Co.	2 85		
World Book Co.	1 25		
Total		173 68	
Sundries:			
A. Chown & Co.	$1 15		
R. J. Rodger	1 80		
Bell Telephone Company	74 19		
Queen's University	19 20		
S. Anglin & Co.	8 74		
R. J. Lindsay	17 12		
Elsie Jones	15 00		
Secretary, School Board, Barriefield	10 00		
C. P. R. Telegraph Co.	26		
Kingston General Hospital	105 00		
Jno. Laidlaw & Son, Ltd.	2 53		
Total		254 99	
Presiding Examiners		97 03	
			$22,875 29

Audited and found correct,
R. Easton Burns, C.A.

October 20th, 1920.

APPENDIX R

LIST OF INSPECTORATES AND INSPECTORS

Inspectorates	Public School Inspectors	Post Office
Algoma District in part; City of Sault Ste. Marie; Town of Bruce Mines	L. A. Green, B.A.	Sault Ste. Marie.
Brant and Norfolk in part; Town of Paris; Village of Waterford (Joint Inspectorate)	T. W. Standing, B.A.	Brantford.
Bruce, East; Towns of Chesley, Walkerton, Wiarton; Villages of Hepworth, Lion's Head, Mildmay, Tara	John McCool, M.A.	Walkerton.
Bruce, West; Towns of Kincardine, Southampton; Villages of Lucknow, Paisley, Port Elgin, Teeswater, Tiverton	W. F. Bald, B.A., LL.B.	Port Elgin.
Carleton, East; Town of Eastview	Thos. Jamieson, B.A.	Ottawa, 115 Strathcona Av.
Carleton, West, and Lanark, East; Towns of Almonte, Carleton Place; Village of Richmond (Joint Inspectorate)	R. C. Rose, B.A.	Carleton Place.
Dufferin; Town of Orangeville; Villages of Grand Valley, Shelburne	W. R. Liddy, B.A.	Orangeville.
Dundas; Villages of Chesterville, Iroquois, Morrisburg, Winchester	Hiram B. Fetterley, M.A.	Winchester.
Elgin, East; Town of Aylmer; Villages of Springfield, Vienna	J. C. Smith, B.A.	St. Thomas.
Elgin, West; City of St. Thomas; Villages of Dutton, Rodney, Port Stanley, West Lorne (Joint Inspectorate)	John A. Taylor, B.A.	St. Thomas.
Essex; Towns of Amherstburg, Essex, Ford, Kingsville, Leamington; Villages of Belle River, St. Clair Beach	D. A. Maxwell, B.A., LL.B., Ph.D.	Windsor.
Essex, North (in part only)	V. C. Quarry, B.A.	Parkhill, R.R. 8.
Frontenac, South; Villages of Garden Island, Portsmouth	S. A. Trustcott, M.A.	Kingston.
Frontenac, North; and Addington (Joint Inspectorate)	M. R. Reid, M.A.	Sharbot Lake.
Glengarry; Town of Alexandria; Villages of Lancaster, Maxville	J. W. Crewson, B.A.	Alexandria.
Grey, East; Towns of Meaford, Thornbury; Village of Flesherton	Samuel Huff, B.A., B.Paed.	Meaford.
Grey, West; Town of Owen Sound; Villages of Chatsworth, Shallow Lake	H. H. Burgess, B.A.	Owen Sound.
Grey, South; Towns of Durham, Hanover; Villages of Dundalk, Markdale, Neustadt	Robert Wright, B.A.	Hanover.
Haldimand; Town of Dunnville; Villages of Caledonia, Cayuga, Hagersville, Jarvis	J. L. Mitchener, B.A.	Cayuga.
Haliburton and E. Muskoka; Town of Huntsville	Geo. E. Pentland, M.A.	Fenelon Falls.
Halton and Wentworth in part; Towns of Burlington, Milton, Oakville; Villages of Acton, Georgetown (Joint Inspectorate)	James M Denyes, B.A.	Milton.
Hastings Centre; Villages of Deloro, Madoc, Marmora, Stirling, Tweed	J. E. Minns, B.A.	Tweed.
Hastings South, and City of Belleville; Towns of Deseronto, Trenton; Village of Frankford (Joint Inspectorate)	H. J. Clarke, B.A.	Belleville.
Hastings, North; Village of Bancroft	Jas. Colling, B.A.	Bancroft.

List of Inspectorates and Inspectors—Continued

Inspectorates	Public School Inspectors	Post Office
Huron, East; Towns of Clinton, Seaforth, Wingham; Villages of Blyth, Brussels, Wroxeter	John M. Field, B.A., Ph.D.	Goderich.
Huron, West; Town of Goderich; Villages of Bayfield, Exeter, Hensall	J. Elgin Tom	Goderich.
Kenora District, in part, Thunder Bay District (East) and Algoma District in part; City of Fort William; Towns of Dryden, Sioux Lookout (Joint Inspectorate)	W. J. Hamilton, B.A.	Fort William.
Kent, East; Towns of Blenheim, Bothwell, Dresden, Ridgetown; Villages of Erieau, Highgate, Thamesville	Rev. W. H. G. Colles	Chatham.
Kent, West, and City of Chatham; Towns of Tilbury, Wallaceburg; Village of Wheatley (Joint Inspectorate)	J. H. Smith, M.A.	Chatham.
Lambton, East (No. 2); Town of Petrolia; Villages of Alvinston, Arkona, Oil Springs, Watford	N. McDougall, B.A.	Petrolea.
Lambton, West (No. 1); City of Sarnia; Town of Forest; Villages of Courtright, Point Edward, Thedford, Wyoming (Joint Inspectorate)	Henry Conn, B.A.	Sarnia.
Lanark, West; Towns of Perth, Smith's Falls; Village of Lanark (Joint Inspectorate)	F. L. Mitchell, M.A.	Perth.
Lanark, East (see Carleton West).		
Leeds and Grenville (No. 1); Town of Gananoque; Villages of Newboro, Westport	James F. McGuire, M.A.	Westport
Leeds and Grenville (No. 2); Town of Brockville; Village of Athens (Joint Inspectorate)	W. C. Dowsley, M.A.	Brockville
Leeds and Grenville (No. 3); Town of Prescott; Villages of Cardinal, Kemptville, Merrickville (Joint Inspectorate)	T. A. Craig	Kemptville
Lennox; Town of Napanee; Villages of Bath, Newburgh (see also Frontenac, North)	E. J. Corkill, B.A.	Napanee.
Lincoln; Towns of Merritton, Niagara; Villages of Beamsville, Grimsby, Port Dalhousie	Geo. A. Carefoot, B.A., B.Paed.	St. Catharines
Manitoulin Dist.; Algoma Dist. in part; Sudbury Dist. in part; Towns of Blind River, Gore Bay, Little Current, Thessalon	James W. Hagan, M.A.	Gore Bay
Middlesex, East; Village of Lucan	P. J. Thompson, B.A.	London
Middlesex, West; Towns of Parkhill, Strathroy; Villages of Ailsa Craig, Glencoe, Newbury, Wardsville	H. D. Johnson	Strathroy
Muskoka, South and West, District; Towns of Bala, Bracebridge, Gravenhurst; Village of Port Carling	H. R. Scovell, B.A.	Bracebridge
Muskoka, East (see Haliburton).		
Muskoka, North (see Parry Sound East)		
Nipissing, North (see Sudbury Dist.).		
Nipissing, South (see Parry Sound East).		
Norfolk; Town of Simcoe; Villages of Delhi, Port Dover, Port Rowan (see Brant Co.)	H. Frank Cook, B.A.	Simcoe.
Northumberland and Durham, West, No. 1; Towns of Bowmanville, Port Hope; Village of Newcastle	E. E. Snider, B.A.	Port Hope.

List of Inspectorates and Inspectors—Continued

Inspectorates	Public School Inspectors	Post Office
Northumberland and Durham, Centre No. 2; Town of Cobourg; Village of Millbrook	J. W. Odell, B.A.	Cobourg.
Northumberland and Durham, East, No. 3; Town of Campbellford; Villages of Brighton, Colborne, Hastings	Robert Boyes	Campbellford.
Ontario, North; Town of Uxbridge; Villages of Beaverton, Cannington	T. R. Ferguson, M.A.	Uxbridge.
Ontario, South; Towns of Oshawa, Whitby; Village of Port Perry	R. A. Hutchison, B.A.	Whitby.
Oxford, North, and City of Woodstock; Villages of Embro, Tavistock (Joint Inspectorate)	J. M. Cole	Woodstock
Oxford, South; Towns of Ingersoll, Tillsonburg; Village of Norwich (Joint Inspectorate)	R. A. Paterson, B.A.	Ingersoll.
Parry Sound, South, District; Town of Parry Sound; Village of Magnetawan.	J. L. Moore, B.A.	Parry Sound.
Parry Sound, East, District; Nipissing South and Muskoka North; Towns of Kearney, Powassan, Trout Creek; Villages of Burk's Falls, South River, Sundridge	R. O. White	North Bay.
Peel; Town of Brampton; Villages of Bolton, Port Credit, Streetsville	W. J. Galbraith, M.A.	Brampton.
Perth, North; Towns of Listowel, Mitchell, St. Mary's; Village of Milverton.	William Irwin, B.A.	Stratford.
Perth, South, and City of Stratford (Joint Inspectorate)	James H. Smith, B.A.	Stratford.
Peterborough, East; Villages of Havelock, Lakefield, Norwood	Richard Lees, M.A.	Peterborough.
Peterborough, West, and Victoria, East; Town of Lindsay; Villages of Bobcaygeon, Omemee (Joint Inspectorate)	G. E. Broderick	Lindsay.
Prescott and Russell; Towns of Hawkesbury, Rockland, Vankleek Hill; Villages of Casselman, L'Original	John Nelson, B.A.	Vankleek Hill.
Prince Edward; Town of Picton; Villages of Bloomfield, Wellington	F. P. Smith, M.A.	Picton.
Rainy River District, and Kenora District in part; Towns of Fort Frances, Keewatin, Kenora, Rainy River	C. McDowell, B.A.	Fort Frances.
Renfrew, North; Town of Pembroke; Village of Cobden	I. D. Breuls, B.A.	Pembroke.
Renfrew, South; Towns of Arnprior, Renfrew; Villages of Eganville, Killaloe Station	G. G. McNab, M.A.	Renfrew.
Simcoe, North; Towns of Barrie, Collingwood, Penetanguishene	Joseph L. Garvin, B.A.	Barrie.
Simcoe, South; Towns of Alliston, Stayner; Villages of Beeton, Bradford, Creemore, Tottenham	Edwin Longman	Barrie.
Simcoe, East; Towns of Midland, Orillia; Villages of Coldwater, Port McNicol, Victoria Harbour	Isaac Day, B.A.	Orillia.
Stormont; Town of Cornwall; Village of Finch	James Froats, M.A., B.Paed.	Finch.
Sudbury District in part; North Nipissing; Towns of Cache Bay, Capreol, Copper Cliff, Massey, Sturgeon Falls, Sudbury, Webbwood	D. M. Christie, B.A.	Sudbury.

List of Inspectorates and Inspectors—Continued

Inspectorates	Public School Inspectors	Post Office
Thunder Bay District West; City of Port Arthur	John Ritchie	Port Arthur.
Timiskaming (North), Algoma (North); Towns of Charlton, Cochrane, Englehart, Iroquois Falls, Matheson, Timmins and Villages of Thornloe	W. Asbury Wilson, B.A.	Haileybury.
Timiskaming District in part, Nipissing in part; Towns of Bonfield, Cobalt, Haileybury, Latchford, Mattawa, New Liskeard, North Bay	P. W. Brown, B.A.	North Bay.
Victoria, West; Villages of Fenelon Falls, Sturgeon Point, Woodville	W. H. Stevens, B.A.	Lindsay.
Victoria, East (see Peterborough West)		
Waterloo, N. (No. 1); City of Kitchener; Town of Waterloo; Village of Elmira (Joint Inspectorate)	F. W. Sheppard	Kitchener.
Waterloo, S. (No. 2); City of Galt; Towns of Hespeler, Preston; Villages of Ayr, New Hamburg (Joint Inspectorate)	Lambert Norman, B.A.	Galt.
Welland, North, City of Welland; Town of Thorold; Village of Chippawa (Joint Inspectorate)	John W. Marshall, B.A.	Welland.
Welland, South, Towns of Bridgeburg, Port Colborne; Villages of Fort Erie, Humberstone	James McNiece, B.A.	Welland.
Wellington, North; Towns of Harriston, Mount Forest, Palmerston; Village of Clifford	Robt. Galbraith, B.A.	Mount Forest.
Wellington, South; Villages of Arthur, Drayton, Elora, Erin, Fergus	J. J. Craig, B.A.	Fergus.
Wentworth; Town of Dundas; Village of Waterdown	Jno. B. Robinson, B.A., B.Paed.	Hamilton.
York, North; Towns of Aurora, Newmarket; Villages of Holland Landing, Sutton West	C. W. Mulloy, B.A.	Aurora.
York, West; Towns of Mimico, Weston; Villages of New Toronto, Woodbridge.	A. L. Campbell, M.A.	Weston.
York, East; Town of Leaside; Villages of Markham, Richmond Hill, Stouffville.	A. A. Jordan, B.A.	Toronto, 63 Orchard View Boulevard.
Brantford, City of	E. E. C. Kilmer, B.A.	Brantford.
Guelph, do	Wm. Tytler, B.A.	Guelph.
Hamilton, do	W. H. Ballard, M.A.	Hamilton.
do do	Jas. Gill, B.A., B.Paed.	Hamilton.
do do	Frank E. Perney, B.A., B.Paed.	Hamilton.
Kingston, do	J. Russell Stuart	Kingston.
London, do	C. B. Edwards, B.A.	London.
do do	V. K. Greer, M.A.	London.
Niagara Falls do, and St. Catharines	D. C. Hetherington	St. Catharines.
Ottawa, do	J. H. Putman, B.A., D.Paed.	Ottawa.
do do	E. T. Slemon, B.A., D.Paed.	Ottawa.
Peterborough, do	A. Mowat, B.A.	Peterborough.
Toronto, do	R. H. Cowley, M.A., Chief Inspector	Toronto.
do do	W. H. Elliott, B.A.	Toronto.
do do	Jos. W. Rogers, M.A.	Toronto.
do do	Geo. H. Armstrong, M.A., B.Paed.	Toronto.
do do	D. D. Moshier, B.A., B.Paed.	Toronto.
do do	N. S. MacDonald, B.A., D.Paed.	Toronto.
do do	Walter Bryce, B.A.	Toronto.
do do	Miss A. E. Marty, M.A., LL.D.	Toronto.
do do		
Windsor, do Sandwich and Walkerville Towns	J. E. Benson, M.A.	Windsor.

List of Inspectorates and Inspectors—Concluded

R.C. Separate School Inspectors

J. F. Power, M.A. ..... Toronto, 33 Dalton Rd.
J. F. Sullivan, B.A. ..... London, 873 Hellmuth Ave.
Jas. E. Jones, B.A. ..... Ottawa, 104 Henderson Ave.
J. P. Finn, B.A. ..... Peterborough.
W. J. Lee, B.A. ..... Toronto, 434 Brunswick Ave.
J. M. Bennett, B.A. ..... Toronto, 47 Browning Ave.
Vincent C. Quarry, B.A. ..... Parkhill, R.R. 8.

English-French Public and Separate School Inspectors

J. S. Gratton ..... Toronto, 77 McGill St.
Jno. C. Walsh, B.A. ..... Ottawa, 72 Sweetland Ave.
James Scanlan ..... Toronto, 321 Markham St.
Joseph Lapensee, B.A. ..... Plantagenet.

Public and Separate Schools

John Waugh, M.A., D.Paed., Chief Insp.. Toronto, Parliament Buildings.
W. I. Chisholm, M.A., Assistant ..... Toronto, Parliament Buildings.
J. B. McDougall, B.A., D.Paed., Asst..... North Bay

Director of Industrial and Technical Education

F. W. Merchant, M.A., D.Paed ..... Toronto, Parliament Buildings.

Director of Professional Training

S. A. Morgan, B. A., D.Paed. ..... Toronto, Parliament Buildings.

High School Inspectors

J. A. Houston, M.A. ..... Toronto, 105 Roxborough St. W.
I. M. Levan, B.A. ..... Toronto, 144 Balmoral Ave.
Geo. F. Rogers, B.A. ..... Toronto, 104 Glencairn Ave.

Continuation School Inspectors

G. K. Mills, B.A. ..... Toronto, Parliament Buildings.
J. P. Hoag, B.A. ..... Toronto, Parliament Buildings.

Manual Training and Household Science Inspector

Albert H. Leake ..... Toronto, Parliament Buildings.

Inspector of Elementary Agricultural Education

J. B. Dandeno, B.A., Ph.D. ..... Toronto, 13 Hazelton Ave.

Inspector of Auxiliary Classes.

S. B. Sinclair, M.A., Ph.D. ..... Toronto, Parliament Buildings.

APPENDIX S

EXAMINATIONS

I. JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1920

Collegiate Institutes	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Barrie		91	75
Brantford		264	225
Brockville	53	94	59
Chatham	79	110	70
Clinton		62	53
Cobourg		100	70
Collingwood		101	94
Fort William		183	152
Galt		229	212
Goderich		80	51
Guelph	124	65	55
Hamilton	637	91	50
Ingersoll		110	92
Kingston	90	158	90
Kitchener-Waterloo		271	233
Lindsay		128	103
London	461	166	132
Morrisburg		58	28
Napanee		89	68
Niagara Falls		105	81
North Bay		128	115
Orillia		136	101
Ottawa	379	525	268
Owen Sound		239	181
Perth		89	67
Peterborough	134	101	60
Picton		70	49
Port Arthur		131	109
Renfrew		139	110
St. Catharines		213	176
St. Mary's		98	88
St. Thomas		215	181
Sarnia		250	219
Seaforth		94	77
Smith's Falls		115	74
Stratford		289	247
Strathroy		112	78
Toronto, Harbord		160	41
Toronto, Parkdale		91	36
Toronto, Jarvis		71	23
Toronto, Humberside		96	27
Toronto, Malvern Ave.		27	10
Toronto, Oakwood		112	47
Toronto, Riverdale		78	20
Toronto	3,095		
Vankleek Hill		81	68
Windsor		287	281
Woodstock		161	141
Totals	5,052	6,663	4,887
High Schools			
Alexandria		86	67
Alliston		42	31
Almonte		65	54
Amherstburg		54	42
Arnprior		79	64
Arthur		64	39
Athens		67	42
Aurora		62	50
Avonmore		27	16
Aylmer		89	52
Beamsville		28	25
Belleville	58	54	46
Bowmanville		57	55
Bracebridge		103	62
Bradford		41	30
Brampton		79	67
Brighton		39	34
Burlington		54	43
Caledonia		44	28
Campbellford		57	46
Carleton Place		63	58
Cayuga		37	24
Chatsworth		53	43
Chesley		53	40
Chesterville		49	39
Colborne		28	25
Cornwall		107	99
Deseronto	12	23	14
Dundalk		39	33
Dundas		115	91
Dunnville		75	54
Durham		79	71
Dutton		58	36
Elora		33	17
Essex		99	78
Exeter		37	33
Fergus		74	53
Flesherton		19	14
Forest		61	42
Fort Frances		53	48
Gananoque		43	34
Georgetown		61	50
Glencoe		49	32
Gravenhurst		22	13
Grimsby		49	42
Hagersville		48	33
Haileybury		66	45
Harriston		43	31
Hawkesbury		51	44
Iroquois		35	26
Kemptville		70	49
Kenora		59	51
Kincardine		68	56
Leamington		82	66
Listowel		103	82
Lucan		62	46
Madoc		54	36
Markdale		35	30

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1920.—Continued

High Schools—Con.	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Markham	.....	41	36
Meaford	.....	89	39
Midland	.....	93	69
Milton	.....	79	55
Mitchell	.....	77	56
Morewood	.....	18	16
Mount Forest	.....	59	31
Newburgh	.....	42	30
Newcastle	.....	16	12
Newmarket	.....	91	72
Niagara	.....	20	18
Niagara Falls South	.....	92	79
Norwood	.....	44	32
Oakville	.....	62	58
Omemee	.....	54	31
Orangeville	.....	53	46
Oshawa	.....	128	118
Paris	.....	82	73
Parkhill	.....	70	62
Parry Sound	.....	111	91
Pembroke	.....	131	102
Penetanguishene	.....	55	46
Petrolia	.....	54	44
Plantagenet	.....	36	26
Port Dover	.....	34	24
Port Elgin	.....	42	34
Port Hope	.....	70	61
Port Perry	.....	55	42
Port Rowan	.....	31	27
Prescott	.....	68	56
Richmond Hill	.....	36	34
Ridgetown	.....	79	56
Rockland	.....	20	17
Sault Ste. Marie	.....	169	137
Shelburne	.....	36	27
Simcoe	.....	92	82
Smithville	.....	21	16
Stirling	.....	55	47
Streetsville	.....	23	23
Sudbury	.....	99	78
Sydenham	.....	38	17
Thorold	.....	52	39
Tillsonburg	.....	55	53
Trenton	26	50	30
Tweed	.....	71	46
Uxbridge	.....	66	55
Vienna	.....	26	21
Walkerton	.....	42	37
Wallaceburg	.....	97	69
Wardsville	.....	18	14
Waterdown	.....	45	33
Waterford	.....	54	40
Watford	.....	49	38
Welland	.....	84	65
Weston	.....	142	123
Whitby	.....	61	56
Wiarton	.....	55	24
Williamstown	.....	34	28
Winchester	.....	64	46
Wingham	.....	65	51
Totals	96	7,030	5,459
Other Places			
Aberfoyle	.....	43	27
Acton	.....	33	31
Agincourt	.....	44	38
Alvinston	.....	37	25
Ameliasburg	.....	37	21
Ancaster	.....	48	33
Angus	.....	12	7
Apsley	.....	8	4
Arkona	.....	20	14
Ashton	.....	11	11
Aultsville	.....	18	10
Ayr	.....	24	21
Ayton	.....	21	16
Bailieboro'	.....	27	20
Bancroft	.....	52	38
Barriefield	.....	34	24
Bath	.....	21	12
Battersea	.....	27	22
Bayfield	.....	13	9
Beachburg	.....	40	20
Beaverton	.....	22	13
Beeton	.....	15	10
Belleville, Co. Centre	52	62	35
Belle River	.....	25	16
Belmont	.....	25	20
Bethany	.....	22	18
Billings' Bridge	.....	7	2
Binbrook	.....	20	15
Bisco	.....	5	2
Blackstock	.....	21	19
Blenheim	.....	82	61
Blind River	.....	24	21
Bloomfield	.....	16	16
Blyth	.....	30	22
Bobcaygeon	.....	27	23
Bolton	.....	36	22
Bothwell	.....	17	15
Bowesville	.....	9	3
Bridgeburg	.....	46	38
Brigden	.....	33	19
Bruce Mines	.....	19	19
Brussels	.....	47	42
Burford	.....	48	30
Burgessville	.....	32	20
Burk's Falls	.....	30	20
Burridge	.....	10	4
Burritt's Rapids	.....	10	8
Byng Inlet	.....	14	9
Caistor Centre	.....	11	10
Callander	.....	5	4

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1920—Continued

Other Places—Con.	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Cannington		20	20
Cardinal		27	18
Cargill		28	20
Carp		23	23
Castleton		9	4
Cataraqui		43	17
Cedarville		10	6
Chapleau		22	14
Charleston		39	31
Claremont		17	15
Clifford		20	16
Cobalt		46	35
Cobden		71	51
Coboconk		12	7
Cochrane		22	17
Coldwater		27	20
Comber		16	13
Coniston		15	9
Cookstown		19	14
Copper Cliff		22	22
Courtright		26	16
Crediton		17	15
Creemore		18	15
Creighton Mine		7	7
Crosshill		16	13
Cultus		19	14
Cumberland		9	6
Dalkeith		14	10
Dashwood		23	20
Delaware		18	18
Delhi		29	25
Delta		60	43
Demorestville		20	10
Denbigh		8	7
Desbarats		13	5
Dickinson's Landing		19	13
Dixon's Corners		22	15
Dorchester Station		54	42
Douglas		35	22
Drayton		42	32
Dresden		52	37
Dromore		11	7
Drumbo		20	17
Dryden		25	14
Dungannon		17	10
Dunsford		18	15
Eastview		26	21
Easton's Corners		13	8
Echo Bay		16	11
Echo Place		42	38
Edith Cavell		45	39
Edgar		5	1
Eganville		48	38
Elmira		62	48
Elmvale		37	33
Embro		34	32
Embrun		21	19
Emo		37	22
Englehart		27	16
Ennismore		18	13
Erin		30	25
Espanola		10	5
Fenelon Falls		44	34
Fenwick		15	13
Feversham		20	8
Fingal		39	26
Flinton		8	6
Florence		20	13
Fonthill		23	13
Fordwich		28	21
Fournier		12	8
Frankford	2	7	6
Galetta		12	9
Gore Bay		47	34
Gowganda		5	3
Grand Valley		29	18
Haliburton		11	10
Hamilton, Co. Centre		69	45
Hanover		39	35
Harrow		28	24
Harrowsmith		26	21
Hastings		16	10
Havelock		34	19
Hawkestone		14	6
Hensall		32	27
Hepworth		22	14
Highgate		38	27
Hillsdale		14	13
Horning's Mills		19	11
Huntsville		47	43
Ignace		3	.....
Innerkip		14	10
Iroquois Falls		15	10
Ivy		11	10
Janetville		11	8
Jarvis		27	22
Jasper		13	10
Jockvale		11	8
Kars		6	6
Kearney		16	7
Keene		29	22
Keewatin		17	12
Kenmore		17	9
Killaloe Station		36	29
Killarney		6	3
Kilmaurs		10	9
Kimberley		15	8
Kinburn		24	19
King		15	15
Kingsville		40	35
Kinmount		14	8
Kintail		8	6
Kirkfield		28	20
Lakefield		59	40

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1920—Continued

Other Places—Con.	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Lanark	.....	73	49
Lancaster	.....	17	9
Lansdowne	.....	34	25
Laurel	.....	19	12
Lefroy	.....	27	19
Lemonville	.....	20	12
Lion's Head	.....	16	7
Little Britain	.....	18	17
Little Current	.....	29	19
London East	.....	135	98
Lucknow	.....	33	26
Macdonald Consolidated, Guelph	.....	36	28
Magnetawan	.....	13	10
Manitowaning	.....	23	14
Manotick	.....	16	8
Maple	.....	13	7
Marmora	.....	37	28
Marshville	.....	25	21
Marsville	.....	12	5
Massey	.....	16	13
Matheson	.....	13	7
Mattawa	.....	18	10
Maxville	.....	39	26
Medina	.....	13	9
Melbourne	.....	27	17
Merivale	.....	23	17
Merlin	.....	49	34
Merrickville	.....	29	25
Merritton	.....	19	16
Metcalfe	.....	31	22
Mildmay	.....	38	33
Milford	.....	28	16
Millbrook	.....	44	32
Milverton	.....	84	66
Mimico	.....	54	47
Minden	.....	16	10
Minesing	.....	14	9
Monklands	.....	11	9
Monteith	.....	7	7
Moorefield	.....	23	16
Moose Creek	.....	16	10
Mount Albert	.....	18	15
Mount Brydges	.....	30	25
Mount Elgin	.....	12	7
Mount Hope	.....	29	18
Mount Pleasant	.....	30	24
Mount St. Patrick	.....	29	21
Mountain Grove	.....	8	4
Mountain Station	.....	26	20
Navan	.....	15	14
Neustadt	.....	9	3
Newboro	.....	30	27
New Hamburg	.....	50	32
Newington	.....	17	11
New Liskeard	.....	53	40
New Toronto	.....	13	13
Nipissing	.....	9	7
North Augusta	.....	26	13
North Gower	.....	13	10
North Lancaster	.....	29	15
Norwich	.....	41	36
Oakwood	.....	14	10
Odessa	.....	18	12
Oil Springs	.....	43	25
Orono	.....	30	19
Ohsweken	.....	7	4
Osgoode Station	.....	22	14
Otterville	.....	17	17
Paisley	.....	40	35
Pakenham	.....	26	21
Palmerston	.....	36	28
Pefferlaw	.....	5	2
Pelee Island	.....	6	4
Pickering	.....	13	6
Plattsville	.....	24	19
Port Burwell	.....	14	6
Port Carling	.....	21	11
Port Colborne	.....	54	51
Port Credit	.....	46	32
Port Dalhousie	.....	56	43
Port Stanley	.....	19	15
Powassan	.....	48	34
Priceville	.....	7	6
Princeton	.....	18	12
Queensville	.....	29	14
Rainy River	.....	15	13
Ramsayville	.....	11	10
Randwick	.....	8	7
Richard's Landing	.....	8	7
Richmond	.....	34	20
Ridgeway	.....	37	27
Ripley	.....	37	25
Rockton	.....	32	21
Rockwood	.....	29	23
Rodney	.....	43	25
Rosemont	.....	9	5
Roseneath	.....	16	8
Rosseau	.....	8	5
Russell	.....	33	23
St. David's	.....	19	11
St. George	.....	20	17
St. Helens	.....	22	16
Sandwich	.....	70	56
Schomberg	.....	42	26
Schreiber	.....	21	14
Scotland	.....	24	20
Secord School (York E)	.....	70	65
Selkirk	.....	24	9
Sharbot Lake	.....	19	9
Sioux Lookout	.....	8	.....
Singhampton	.....	12	8
Solina	.....	12	9
South Finch	.....	39	25

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1920—Concluded

Other Places—Con,	Number granted certificates on Principal's recommendation	Number takin Departmental Examination	Number passed Departmental Examination
Southampton		16	16
South Indian		8	7
South Mountain		19	13
South Porcupine		17	17
South River		7	3
Sparta		36	23
Spencerville		30	20
Springfield		17	12
Sprucedale		15	12
Stayner		30	29
Stella		10	7
Stevensville		17	14
Stittsville		15	14
Stony Creek		30	17
Stouffville		22	20
Strabane		42	30
Sturgeon Falls		44	34
Sunderland		29	21
Sundridge		12	4
Sutton		41	29
Swastika		13	8
Tamworth		30	22
Tara		28	24
Tavistock		12	11
Teeswater		51	35
Thamesford		31	26
Thamesville		48	27
Thedford		23	6
Thessalon		41	37
Thornbury		54	31
Thorndale		42	29
Thornhill		14	12
Tilbury		36	31
Timmins		24	20
Tiverton		16	12
Toronto, De La Salle Institute		49	13
Tottenham		21	11
Uptergrove		46	37
Varna		16	11
Verona		33	15
Victoria Harbour		22	17
Vineland		47	33
Walkerville		50	47
Warkworth		28	22
Waubaushene		7	
Webbwood		5	3
Wellandport		20	13
Wellington		31	22
Westboro'		63	62
Westfield		20	16
West Lorne		60	31
Westport		37	29
Wheatley		33	28
Whitevale		14	11
Wilberforce		14	7
Wilkesport		22	11
Williamsburg		29	11
Willowdale		19	17
Winchelsea		21	14
Winona		12	12
Wolfe Island		20	13
Woodbridge		32	24
Woodville		23	17
Wooler		27	24
Worthington		17	11
Wroxeter		29	23
Wyoming		34	22
Yarmouth Heights		52	28
Zephyr		12	10
Zurich		12	10
Totals	54	9,021	6,503
Collegiate Institutes	5,052	6,663	4,887
High Schools	96	7,030	5,459
Other Places	54	9,021	6,503
Grand Totals, 1920	5,202	22,714	16,849

II. JUNIOR PUBLIC SCHOOL GRADUATION DIPLOMA EXAMINATION, 1920

Centre	Examined	Passed	High School Entrance allowed	Centre	Examined	Passed	High School Entrance allowed
Alvinston	2	2		Ottawa	90	66	21
Bayfield	5	5		Owen Sound	3	1	
Beachburg	10	5		Pefferlaw	3	2	
Blenheim	2	2		Picton	2	1	
Blyth	1	1		Plantagenet	6	4	
Bolton	8	6		Priceville	3	3	
Bracebridge	13	11		Renfrew	4	3	
Brigden	6	6		Richard's Landing	1	1	
Burford	6	5		Rodney	5	1	4
Courtright	4	4		Rosseau	2	2	
Crediton	6	6		St. Helen's	4	3	
Creighton Mine	8	8		Schreiber	4	3	1
Cumberland	6	4		Selkirk	3	2	
Dashwood	3	3		Sioux Lookout	3		
Dungannon	6	3	1	Sunderland	3	3	
Dutton	5	5		Sundridge	5	2	
Echo Bay	4	2		Sprucedale	6	5	
Emo	3	3		Stony Creek	1	1	
Florence	7	4		Strabane	2	2	
Fordwich	7	6		Thamesville	2	2	
Gore Bay	3	1		Tillsonburg	3		
Hensall	2	2		Tiverton	3	3	
Kearney	1	1		Toronto	22	20	2
Kimberly	1	1		Tweed	5	4	
King	7	6		Uxbridge	2	2	
Kingsville	5	5		Victoria Harbour	4	3	
Kinmount	7	6		Waterdown	2	1	
Kintail	4	3		White River	2	1	
Lakefield	1			Winchelsea	7	6	1
Magnetawan	5	4		Woodbridge	4	2	
Marmora	16	15		Woodstock	5	5	
Mattawa	6	3		Wooler	9	9	
Milton	2	2		Worthington	2	2	
Mimico	5	4		Wroxeter	2	2	
Minden	4	2		Zephyr	4	4	
Navan	1	1		Zurich	9	7	2
Neustadt	3	3					
Nipissing	4	4		Totals, 1920	431	335	32
Oil Springs	5	3					

APPENDIX T

LIST OF CERTIFICATES ISSUED BY THE DEPARTMENT OF EDUCATION, 1920

I. Public School Inspectors' Certificates

Downey, Roscoe F., B.A., B.Pæd.
Maxwell, Thomas P., B.A.
Pentland, George E., M.A.
Willson, Alice, B.A.

II. High School Principals' Certificates

Breslove, David, M.A. (Classics.)
Clarke, Walter, B.A. (Classics.)
Collins, James, B.A.
Dafoe, Helen I., B.A. (Mods. and Hist.)
Danard, Charles H., B.A.
Danby, Frederick W., B.A.
Devitt, Samuel Girvin, B.A.
Duncan, Muriel, B.A.
Eckhardt, Jessie E., B.A.
Ferguson, Walter P., M.A. (Science.)
Gilhooly, Beatrice C., B.A. (Eng. & Hist.)
Goldstick, Isidore, M.A. (Mods. & Hist.)
Gregory, Alice E., B.A. (Classics.)
Hall, F. Grace, B.A. (Mods. and Hist.)
Heath, Horace J., B.A. (Science.)
Henderson, James C. G., M.A.
Hills, Minnie B., B.A. (Math.)
Hind, Edith J., B.A.
Jeffrey, Hugh G. S., B.A.
Jones, Rachel L. L., M.A.
Lamont, Alexander D., B.A.
Lawrence, Charles F., B.A. (Math. and Phys.)
MacMinn, Marie, B.A. (Eng. and Hist.)
Martin, Jean E., B.A. (Math. and Phys.)
McCamus, William R., B.A. (Classics.)
McCaw, Hester E. A., B.A. (Eng. & Hist.)
McLean (Mrs.), Jennie, B.A.
Morrison, William J., B.A. (Science.)
Mott, Katherine S., B.A. (Eng. & Hist.)
Nelson, Eva E., B.A.
Newton, Amy A., B.A. (Mods. & Hist.)
O'Neill, Mary M., B.A.
Rochat (Mrs.), Norma D., M.A. (Mods. and Hist.)
Saunders, Lucy, M.A.
Southcombe, William J. S., B.A. (Classics.)
Thoms, Clarence J., B.A. (Eng. & Hist.)
Tovell, Alene M., B.A. (Eng. & Hist.)
Urlin, William R., B.A. (Math.)
Wheelton, Leonard, B.A.
Wilson, James J., B.A.
Wilson, James S., B.A.

III. High School Assistants' and Specialists' Certificates

Adams, William A.
Alkerton, Nancy E.
Almas, Anna F., B.A. (Mods. & Hist.)
Arnold, Lillian B.
Aylsworth, Bessie C.
Batchelor, Edna G., B.A. (Mods. & Hist.)
Birchard, Alexander F. (Phys. Cul.)
Bole, Abbie M., B.A.
Brain, A. Beatrice, B.A. (Art.)
Brokenshire, Melville C., B.A., (Phys. Cul.)
Brown, Margaret S., B.A. (Phys. Cul.)
Buchanan, Luella M.
Buck, Charles S., (Art.) (Phys. Cul.)
Burton, Violet, B.A. (Classics.)
Campbell, Archibald D., B.A.
Campbell, John J.
Campbell, Stella K. (Phys. Cul.)
Carrie, Violet G., B.A. (Phys. Cul.)
Cavell, Edward E.
Challinor, John L. (Phys. Cul.)
Chown, Elizabeth, B.A. (Phys. Cul.)
Clark, Alice B.
Clarke, Olive M., B.A.
Clinton, Nell M., B.A.
Cooke, Violet E. W., B.A.
Cowan, Anna K. (Art.)
Cowan, Jessie I., B.A.
Curry, Jessie E.
Danard, Charles H., B.A. (Phys. Cul.)
Darby, Laura W., B.A.
Davis, Eleanor A., B.A. (Phys. Cul.)
De La Mater, Magdalene (Phys. Cul.)
Dent, Beatrice.
Dickson, Lucy I. (Phys. Cul.)
Dixon, Frederick W.
Dobson, George C., B.A.
Dorrance, Annie V. (Phys. Cul.)
Durnin, Letitia E. (Phys. Cul.)
Durnin, Vera B. (Phys. Cul.)
Dykes, Vera K. (Phys. Cul.)
Eadie, William M., B.A. (Phys. Cul.)
Edge, Alix M.
Entwistle, Merton L. (Phys. Cul.)
Evans, Margaret E.
Evans, Rennie M., B.A.
Farley, Hazel, B.A.
Feasby, Harold G. (Phys. Cul.)
Fennell, Rena L.
Ferguson, Elizabeth D. (Art.)
Ferguson, Evalena, B.A.
Finch I. Mae, B.A. (Art.)
Foerster, Arthur J., M.A. (Math. & Phys.)
Foreman, Kathleen B., B.A.

III. High School Assistants' and Specialists' Certificates.—Continued

Found, Ada C., B.A. (Commercial.)
Franklin, Marion M., B.A.
Galloway, Jessie L., B.A. (Phys. Cul.)
Garvey, Leo. J.
Geddes, Mary M.
Gillham, Blanche.
Gillies, Agnes M., B.A. (Phys. Cul.)
Gillies, Ina M., B.A.
Goldstick, Isidore, M.A. (Mods. & Hist.)
Gordon, James I., B.A.
Grant, Cora.
Griffin, Selwyn P., B.A.
Grindell, Hazel.
Guthrie, Ethel R., B.A. (Phys. Cul.)
Hall, Marjorie S., B.A. (Mods. & Hist.)
Hammell, Ethel E. M., B.A. (Eng. & Hist.)
Harding, Mary J., B.A.
Harper, Gertrude A., B.A.
Harris, L. Morwenna (Art.)
Hart, Luther S. (Art.)
Hately, Mary E., B.A.
Heather, Ruth (Commercial.)
Hickey, Philippa A. V. (Phys. Cul.)
Hildred, Edna L., M.A. (Mods. & Hist.)
Hoey (Mrs.), Beatrice, M.A. (Classics.)
Houser, Evelyn G. (Art.)
Hudson, Annie L. (Commercial.)
Humphries, Wilhelmina M., B.A. (Math. & Phys.)
Hunter, Lily P., B.A. (Art.)
Ingham, Harriet, B.A. (Eng. & Hist.) (Mods. & Hist.) (Phys. Cul.)
Jenkins, James T., B.A. (Math. & Phys.)
Johnston, Agnes E., B.A. (Mods. & Hist.)
Jones, Rachael L. L., M.A., (Phys. Cul.)
Jones, Stephanie W. (Phys. Cul.)
Joynt, James H.
Kennedy, Anna, B.A.
Kenyon, Grace, B.A. (Classics.)
King, Annie A.
Kinnee, Herbert C., B.A. (Phys. Cul.)
Kirkwood, Elizabeth M.
Knapp, Elizabeth E.
Knight, Florence I., B.A.
Knowles, Anna V.
Knowles, John H., B.A.
Lang, Jean K., B.A. (Mods. & Hist.)
Learoyd, Clarence W., B.A. (Phys. Cul.)
Lemon, Robert C., B.A. (Eng. & Hist.)
Locklin, Elva J., B.A. (Art.)
Logan, Helena B.
Luke, Dorothy H., B.A. (Mods. & Hist.)
Macdonald, Margaret J.
MacGregor (Mrs.), Jeanette E. (Phys. Cul.)
MacIntyre, Anna M. (Phys. Cul.)
MacKay, Hector Hugh.
MacNeil, Lena L.
Macpherson, Mary K., B.A. (Mods. & Hist.)
MacPherson, Pearl, B.A. (Classics.)
MacPherson, Rose.
Mallory, Bertha (Phys. Cul.)
Martin, Elizabeth D. G., B.A. (Classics.)
McCallum, Mary, B.A. (Phys. Cul.)
McCamus, Bessie, B.A. (Eng. & Hist.) (Art.)
McCauley, Ina H., B.A. (Eng. & Hist.)
McCrae (Mrs.), Mary I., B.A. (Mods. & Hist.)
McKenna, Jessie, B.A.
McKillop, Archibald F., B.A. (Math.)
McLachlin, Janet E. (Art.)
McWilliams, Walter A.
Menhennick, Ada M., B.A. (Mods. & Hist.)
Mielhausen, Albert, B.A.
Millar, Annie B., B.A. (Eng. & Hist.)
Mitchell, Lillian Grace (Art.)
Mitchell, May (Phys. Cul.)
Moore, Kathleen V., B.A.
Morgan, Grace, B.A. (Mods. & Hist.)
Mott, Katherine Stella, B.A. (Art.)
Moyer, Lina R., B.A.
Muirhead, Jessie L., B.A. (Math & Phys.) (Phys. Cul.)
Murray, Edith M.
Newton, Amy A., B.A. (Mods. & Hist.)
Ney, Louise E. (Art.)
Nicholson, Elvira E., M.A. (Art.)
Noonan, Aileen, B.A. (Mods. & Hist.)
Oaks, Anna M., B.A. (Mods. & Hist.)
O'Connor, Alice (Mother Ambrose).
O'Neil, Jessie, B.A.
Ord, Annie L.
Parr, Sarah E. (Phys. Cul.)
Percival, Mary L., B.A. (Art.)
Philp, James H., B.A. (Phys. Cul.)
Philp, Nellie M., B.A. (Phys. Cul.) (Science.)
Powell, James A., B.A.
Preston, Gardener A., B.A. (Math. & Phys.) (Phys. Cult.)
Redmond, Edith J., B.A. (Art.)
Roberts, Mabel E., B.A. (Art.)
Robinson, Frances A., B.A. (Phys. Cult.)
Rogers, William C., M.A. (Art.)
Rowntree, Annie E., M.A. (Phys. Cult.)
Runians, Minnie C., B.A. (Eng. & Hist.)
Shaw, Ada E., B.A.
Shaw, Elsie M.
Sinclair, Ella A., B.A. (Classics.)
Smith, Marion E., B.A. (Phys. Cult.)
Somerville, Eva M. (Art.)
Southcombe, William J. S., B.A. (Phys. Cult.)
Spark, George, B.A.
Spencer, Watson G., B.A.
Stanley, Pauline M., B.A.
Steele, Katherine R., B.A. (Eng. & Hist.)
Stevenson, Clara M., B.A. (Eng. & Hist.)
Stewart, Alexander G.
Stewart, Margaret E. (Art.)
Stillwell, Laura, B.A. (Art.)
Stilwell, Ayrest L., B.A. (Phys. Cult.)
Stockdale, Thomas N. (Commercial.) (Phys. Cult.)
Stouffer, Archibald.
Strathdee, Mary.
Stuart, Agnes M., B.A. (Mods. & Hist.)
Summerby, Frederika, B.A.
Swallow, Margaret B.

III. High School Assistants' and Specialists' Certificates.—Continued

Switzer, Neva (Art.)
Tennant, Herbert M.
Tighe, Elsie S., B.A. (Eng. & Hist.)
Tobin, Lilly S., B.A. (Mods. & Hist.)
Traver, Lillie A., B.A. (Eng. & Hist.)
Trench, William W. A., B.A. (Phys. Cult.)
Tuck, Ella M., B.A.
Twiss, Countess L., B.A. (Art.)
Waddell, T. Kenneth, B.A.
Wallace, Minnie G.
Watson, Mabel Alberta.
Weatherill, Lillian.
Wells, Dorothy.
White, Orville R. (Phys. Cult.)
Whitelock, Stanley G., B.A.
Whitton, Lillis Pearl, B.A. (Mods. & Hist.)
Williams, Grace E., B.A. (Mods. & Hist.)
Wilson, James S., B.A.
Wilson, Muriel K.
Worden, Ernest H. G. (Phys. Cult.)
Yorke, Charles G., B.A. (Phys. Cult.)
Young, Madeline C., B.A. (Eng. & Hist.)

IV. Permanent Elementary Certificates

Adams, Edith I. (Phys. Cul.)
Adams, John M. (Phys. Cul.)
Adams, Margaret (Agri.)
Airth, Edith (Agri.)
Alkenbrack (Mrs.), Alma J. (Agri. & Art.)
Alkerton. Nancy E. (Art.)
Almas, Anna F., B.A. (Phys. Cult.)
Anguish, Hazel (Agri.)
Atcheson, Olive I. (Agri.)
Baker, Matilda M. H. (Agri.)
Barlow, Frederick J., B.A. (Phys. Cult.)
Bell, M. F. Winifred (Phys. Cult.)
Bentham, Rena F. (Agri.)
Berry, Wenonah V. (Art.)
Bole, Abbie M., B.A. (Phys. Cult.)
Bonis, Harry, B.A. (Phys. Cult & Art.)
Breen, Hazel M. (Agri.)
Breen, May K. (Agri.)
Brigham, Olvetta (Art.)
Broad, Luella L., B.A. (Art.)
Burchill (Mrs.), Jean. (Phys. Cult.)
Cameron, Allan A. (Phys. Cult.)
Casselman, Myrtle B. (Agri.)
Cattanach, Mabel L. (Agri.)
Clarke, Olive M., B.A. (Phys. Cult.)
Clinton, Nell M., B.A. (Phys. Cult.)
Cooke, Violet E. W., B.A. (Art, Phys. Cult.)
Cowan, Anna K. (Phys. Cult.)
Cowan, Jessie I., B.A. (Phys. Cul., Art.)
Crunican, N. Eugenia (Mother Rita). (Art.)
Currie, L. A. Mina (Agri.)
Curry, Jessie E. (Phys. Cult.)
Cumming, Eva M., B.A. (Phys. Cult.)
Davidson, John H., M.A. (Phys. Cult.)
Davis, Blanche E. (Agri.)
Dixon, Frederick W. (Art.)
Eckhardt, Jessie E., B.A. (Phys. Cul.)
Edge, Alix M. (Art.)
Ellacott, Pearl R. (Agri.)
Fenwick, Elizabeth A., B.A. (Phys. Cult.)
Ferguson, Evalena, B.A. (Phys. Cult.)
Found, Ada C., B.A. (Phys. Cult.)
Franklin, Marion M., B.A. (Phys. Cult.)
Garrett, Evelyn C. (Phys. Cult.)
Geddes, Mary M. (Art.)
Gilfillan, Viola, M.A. (Phys. Cult.)
Gilholm, Eva H. (Agri.)
Gliddon, Mildred E. (Phys. Cult.)
Grindell, Hazel (Art.)
Grunig, Godfrey J. (Agri.)
Gulley, Henry (Manual Training.)
Hall, F. Grace, B.A. (Phys. Cult.)
Harding, Mary J., B.A. (Phys. Cult.)
Hart, Luther S. (Phys. Cult.)
Haviland, Hugh J., B.A. (Phys. Cult.)
Hay, Mary (M. M. of the Angels). (Art.)
Henderson, Anna L. (Agri.)
Hicks, Evalyn G. (Phys. Cult.)
Hicks, Viva M. (Art.)
Hoey (Mrs.), Beatrice, M.A. (Phys. Cult.)
Horne (Mrs.), Laura E., B.A. (Phys. Cult.)
Houser, Evelyn G. (Phys. Cult.)
Husband, Edith P., B.A. (Phys. Cult.)
Hyland, Lena (Phys. Cult.)
Joynt, James H. (Phys. Cult.)
Judge, Albert E., B.A. (Phys. Cult.)
Kirkwood, Elizabeth M. (Phys. Cult.)
Knapp, Elizabeth E. (Art, Phys. Cult.)
Knowles, Edith (Agri.)
Knowles, John H., B.A. (Phys. Cult.)
Laughlin, Ruby J. (Art, Phys. Cult.)
Lawlor, Richard G., B.A. (Phys. Cult.)
Logan, Helena B. (Art.)
MacKenzie, Beatrice M. (Agri.)
MacKichan, Peter, B.A. (Phys. Cult.)
MacNeil, Lena L. (Art.)
MacPherson, Rose (Art, Phys. Cult.)
McCauley, Ina H., B.A. (Phys. Cult.)
McCrae (Mrs.), Mary I., B.A. (Phys. Cult.)
McDonald, Vivian C. (Art.)
McGibbon, Hazel M. (Art.)
McKee, Mary (Agri.)
McKenna, Jessie, B.A. (Phys. Cult.)
McRae, Alice A., B.A. (Art.)
Maitland, Jessie H., B.A. (Phys. Cult.)
Maley, E. Pearl (Agri.)
Moore, Kathleen V., B.A. (Art.)
Morgan, Grace, B.A. (Phys. Cult.)
Morrison, William J., B.A. (Phys. Cult.)
Morton, Christine H. (Art.)
Ney, Louise E. (Phys. Cult.)
Nicholson, Elvira E., M.A. (Phys. Cult.)
Nolan, Mary A. (Sr. M. Rosalie.) (Art.)
Oaks, Anna M., B.A. (Phys. Cult.)
O'Grady, Frances (Agri.)
Paton, Katharine (Art.)

IV. Permanent Elementary Certificates.—Continued

Pfohl, Edith M. (Agri.)
Philp, Florence H. (Phys. Cult.)
Powell, James A., B.A. (Phys. Cult.)
Rawlings, L. Berenice (Agri.)
Ready, Mae J. B. (Agri.)
Richardson, Beatrice (Agri.)
Richardson, Miriam L. (Agri.)
Ridgway, Lucille A. (Manual Training.)
Ronald, Anne (Agri.)
Rice, Elsie M. (Phys. Cult.)
Shaw, Ada E., B.A. (Phys. Cult.)
Shepley, Addie M. (Phys. Cult.)
Sinclair, Ella A., B.A. (Phys. Cult.)
Sinclair, Margaret (Phys. Cult.)
Smith, Donald G. (Phys. Cult.)
Smith, Isobel K., B.A. (Phys. Cult.)
Smyth, Susie I. (Agri.)
Steele, Katherine R., B.A. (Phys. Cult.)
Stevens Myrtle H., B.A. (Phys. Cult.)
Stewart, Jessie M. (Agri.)
Strathdee, Mary (Art.)
Suttaby, Fannie E. (Agri.)
Swallow, Margaret B. (Art.)
Tench, William H. (Phys. Cult.)
Toll, Wilhelmina N. (Art.)
Traver, Lillie A., B.A. (Phys. Cult.)
Wallen, Wilfrid B. (Art.)
Weatherill, Lillian (Art.)
Wells, Dorothy (Phys. Cult.)
Whaley, Mary A. (Agri.)
White, Mabel R. (Art.)
White, N. Kathleen (Art.)
Williams, Albert, B.A. (Phys. Cult.)
Young, Gordon (Phys. Cult.)
Young, Ida M. (Agri.)
Zeron, Frances A. (Agri.)

V. Permanent Supervisors' and Intermediate Certificates

Anderson, George J. (Art.)
Baskerville, Eleanor (Vocal Music.)
Harper, David (Phys. Cult.)
Hunter, Anna J. (Vocal Music.)
Jones, Stephanie W. (Phys. Cult.)
Lince, Esther M. (Art.)
Salvadge, Mabel S. (Art.)
Spark, George (Agri.)
Wheable, Geoffrey A. (Phys. Cult.)

VI. Permanent First Class Certificates

Abbott, Florence Mary.
Adams, Carl Wesley.
Aitchison, Edna Mae.
Anderson, Isabel.
Appleyard, Gertrude G.
Armstrong, Jean L.
Armstrong, Thomas W.
Arnold, Elizabeth M.
Axon, David Hiram.
Banks, Edna Beatrice.
Beattie, Edith E.
Beattie, Ethel Margery.
Bennett, Grace Dorothy.
Blatherwick, Irene F.
Blum, Freda.
Boles, Roy Charles.
Bristow, Mary.
Bruin, Maude Edith.
Buckle, Mabel Christina.
Bunner, Muriel Willard.
Cameron, Robert C.
Carlyle, Helen R.
Carruthers, Orville Knowles.
Carson, Sarah.
Cattanach, Margaret.
Cavanaugh, William.
Chamberlin, Florence A.
Clements, Harriet A.
Collins, Bertha Victoria.
Cosgrove, James Earle.
Coughlin, Virginia.
Coutts, Martha Jean.
Crawford, Catherine I.
Crawford, Helen M.
Curry, Edna M.
Curtis, Eunice M.
Darch, Eva J.
Dawson, Grace L.
Dickson, Archibald Chester.
Dillen, Mary G.
Dobson, Muriel M.
Dougall, Laura Helen.
Durst, Lorna M.
Edwards, Myrtle.
Evans, Marion C.
Farrell, Marie Cecilia.
Fick, Ellis Lloyd.
Fisher, Florence.
Fleming, Earl A.
Fortier, May L.
Gall, Jean C.
Garbutt, Egbert Price.
Garrett, Norman.
Garry, Grace A.
Gibson, Margaret F., B.A.
Givens, Myrtle B.
Graham, Ella Etta.
Haig, Allister P.
Haines, Florence L.
Harris, Beatrice E.
Harris, Harold Wilfrid.
Hartwick, William Ernest.
Hattin, Richard Arthur.
Hayes, Roberta May.
Heath, Martha E. M.
Henderson, John McCallum.
Hess, Flora I.
Hill, Joseph Pearson.
Hooper, Hazel Ruth.
Horton, Dorothy E.
Houison, Catherine Elizabeth.
Houston, William John.
Houze, Edna Isabel.
Howse, Lila R.
Hueston, Eva M.
Inman, Marjorie E.
Johnson, Annie Belle.
Jackson, Helen K.
Johnston, Helen Louise.
Jourdan, Florence M.
Justice, Mildred May.
Kay, Ruth Irene.
Keeler, Joan, B.A.
Kennedy, Margaret W.
Kerr, Clarence Lorne.
Kilty, Clarence George.
King, Alexander Ford.
King, Nellie N.
Kirley, Hilda F.
Koch, William Henry.
Laidlaw, Luella Harriet.
Lawrence, Edna H.
Leggott, Louie Viola.
Luxon, Mary Charlotte.
Lynch, Rose Anna Mary.
MacDougall, Alice C.
MacPhail, Jean C.
MacPherson, Donald Stuart.
Marchant, Gladys O.
Martin, Jean.
Matchett, Iola A.
Matthew, Doris A.
Maybee, Mildred J.
McCamus, Laurence David.
McCartney, Zella M.
McCausland, Ruth Evelyn.
McCreary, Stella Bayne.
McEwen, Thos. R.
McFarlane, Laura J.
McNally, Nora Catharine.
McPhail, Alexander Harold.

VI. Permanent First Class Certificates.—Continued

McPherson, May I.
Middleton, Helena.
Millar, Margaret Alexandra.
Mitchell, James Harvey.
Moore, Henry C.
Morton. Mary Isabelle.
Muir, George.
Muir, Shirley L.
Nesbitt, Robert Norman.
Nickle, Margaret I.
Norris, Robert H.
North, Nina Marie.
Oakes, Walter A.
O'Brien, Catherine E.
O'Connell, Margaret M.
Olmsted, Carrie Edith.
O'Toole, Mary E.
Palk, Katie E.
Parks, Minnie.
Pike, Abram B.
Plewes, Doris Willard.
Prentice, Helen M.
Prueter, Hubert John.
Rannie, Grace I.
Rawson, Kathleen I.
Reaman, Myrtle Irene.
Reids, Jessie A.
Ross, Alexander Munro.
Ross, Helen Isabel Catherine.
Ross, Jeanie H.
Ruse, Elma L.
Russell, Annie Elizabeth.
Russell, Jasper T. H.
Rutherford, Gordon Campbell.
Ryan, Bessie Margaret.
Scammell, Beatrice Lane.
Sharpe, Jessie Margaret.
Shepherd, Elizabeth.
Sheridan, Rhea M.
Sherin, Alice Elsie.
Slater, Arthur C.
Slater, Marjorie L.
Sliter, Margaret Betty.
Smith, Eleanor.
Spearin, Clara Mary.
Spence, Frances Mary.
Stewart, Winona M.
Stothers, Carman E.
Sutherland, Anna Olive.
Switzer, Mary Grace.
Tamblyn, Elva R. (Mrs.)
Taylor, Florence Wilkinson.
Tennant, Herbert M.
Thompson, Ella Marjorie.
Treitz, Ernest L.
Tully, Oral L.
Turnbull, Jennie Ferguson.
Wallace, Mary L. (Mrs.)
Ward, William Frank.
Waterman, Isobel M.
Watt, James Hamilton.
Western, Edith Anna.
Wood, Annie L.
Woods, Annie Evelyn.
Woods, Kathleen A.
Wright, Verna M.
Young, Jean M.
Yates, Madeliene H.

VII. Permanent Second Class Certificates

Abel, Jessie May.
Acheson, Ada W.
Acheson, Mary L.
Acton, Ellen M.
Aitchison, Edna May.
Alexander, Helen M.
Alexander, Merle.
Allaway, C. Marjorie.
Allen, Annie G.
Allen, Viola M.
Allin, Eleanore I.
Allison, Lola E.
Alton, Harry W.
Amey, Dorothy E.
Anderson, Annie E.
Anderson, Mary Lillian.
Andrew, Laura Jean.
Andrew, William.
Annett, Ethel L.
Archibald, Annie.
Arkils, Laurel Ruby.
Arkils, Maude.
Armbrust, Nellie C.
Armstrong, Doris E.
Armstrong, Josephine M.
Armstrong, Sarah Olive.
Armstrong, Vera B.
Arnold, Lulu M.
Artindale, Gladys.
Ashley, Ethel.
Asquith, Verda M.
Atcheson, Sadie G.
Atkinson, Alma Laura.
Atkinson, Amy Muriel.
Atkinson, Greta M.
Augustine, Ellen I.
Babb, Annie V.
Babcook, Josie Rosamund.
Baker, Ada V.
Baker, Amy E.
Baker, Marion S.
Baker, Matilda M. H.
Baker, Nina Irene.
Ball, Addie Jane.
Ball, Amy L. M.
Ball, Ina B.
Balmer, May H.
Barber, Florence L.
Barbour, Mary.
Barbour, Wilfred N.
Barker, Olive Viola.
Barnard, Vera M.
Barnes, Millie A.
Bate, Clare.
Bate, Lucy L.
Bateman, Dollie Bell.
Beach, Helen Jean.
Bean, Howard Leslie.
Beck, Margaret E.
Becker, Myrtle.
Beckett, Gerald Everton.
Beckett, Marie.
Becking, Harvey W.
Belford, Edna.
Bell, Bertha M.
Bell, Victoria Ellen.
Bellamy, Bessie.
Bennett, Marjorie C.
Bergman, Frieda.
Bernath, Elva.
Berst, George Elmer.
Best, Caroline Wallace.
Betzner, Laura Georgina.
Bilger, Edna A.
Bird, Marion E.
Birdsell, Marion Sylvia.
Bisbee, Wilfred Carr.
Black, Isabella Simpson.
Black, Maron M.
Blanchard, Maud.
Boadway, Paul.
Boland, Mary Johannah.
Bole, Mary E. May.
Bolender, Elizabeth.
Bonhower, Maude E.
Borneman, Hazel Beatrice.
Bott, Susie Jane.
Boucher, Margaret Bessie.
Bowker, James F.
Boyes, Mary E.
Brackin, Bessie Anne.
Bradd, Helen Edith.
Bradford, Laura E.
Bradley, Flossie Victoria.
Brady, Kathleen.
Bramhill, Mary A.
Breault, Annie G.
Breckenridge, Bessie Grace.
Breckenridge, Celia.
Breen, Clare.
Breene, Mabel Helen.
Brenchley, Hazel M.
Brennan, Anna M.
Brett, Alice May.
Brisson, Helene A.
Bristow, Jessie E.
Brooks, Lily.
Broughton, Mabel P.
Brown, Edith Gladys.
Brown, Helen.
Brown, Mabel H.
Brown, Rena M.
Brown, Vera May.
Brown, Winnifred M.
Brumwell, Mary Maud.
Brunton, Eleanor Jane.
Buchanan, Catherine Flora.

VII. Permanent Second Class Certificates.—Continued

Budge, Marjorie Helen Lois.
Buller, Edith M.
Bullick, Olive M.
Bunton, Beatrice.
Burchill, Ida May.
Burger, Flossie.
Burke, Anna E.
Burke, Mary V. (Sr. M. Gonzaga).
Burnside, Grace A.
Burton, Kathleen D.
Burton, Mildred O.
Bush, Helena M.
Bushfield, Hazel Marion.
Byers, Lulu Marion.
Byers, Mary Eleanor.
Cairns, Minnie E.
Caldwell, Ada M.
Call, Florrie.
Callaghan, Gladys K.
Cameron, Catharine (Sr. M. St. George).
Cameron, Hazel.
Cameron, Irene R.
Cameron, Jennie Milroy.
Cameron, Urla B.
Campbell, Ada M.
Campbell, Adah Margaret.
Campbell, Archibald Roy.
Campbell, Enabelle.
Campbell, Katherine.
Campbell, Margaret Helen.
Campbell, Margaret Lydia Ann.
Campbell, Margaret Wilma.
Campbell, Marion E.
Campbell, Mary C.
Campbell, Ruth Hilda.
Campsall, Meta Lena.
Canning, Ella May.
Cannon, Edith Pearl.
Capps, Ruby Beatrice.
Carleton, Harry Gordon.
Carling, Madeleine F.
Carroll, Mary E.
Carter, Bertha E.
Carter, Mabel E.
Cartledge, Lottie W.
Carty, Justina.
Case, Annie Gertrude.
Cassan, Clarence S.
Casselman, Helen K.
Cavanagh, Ella M. A.
Caverhill, Florence H.
Chambers, Mary Adelaide.
Charter, Sarah M.
Chatland, Edna.
Chauvin, Augustine.
Cheyne, Eva Bell.
Christie, Loretto (Sr. M. Eudocia).
Christilaw, Eva Mildred.
Christner, Katie A.
Church, Lillian M.
Clark, Mary.
Clarke, Eva B.
Clarke, Marjory Helen.
Claus, Leila Edna.
Clench, Millie Elizabeth.
Cline, Estella B.
Clow, Annie O.
Cockburn, Evelyn C.
Cockerline, Catharine Meyrl.
Colling, Freda Margaret.
Collins, Lenore Mary.
Collins, Susie.
Collinson, Gladys.
Colville, Marjorie Constance.
Colwell, Ellen Maude.
Comfort, Ona Winnifred.
Conroy, Margaret Wadena.
Convay, Martha E.
Cook, Olive Berneice.
Cook, Phyllis Amelia.
Copp, Leo Wilberforce.
Corbett, Hazel Vera.
Cornell, Ezra W.
Cotie, Mary M.
Coulthart, Zella May.
Coursey, Gladys R.
Coutts, Wallace M.
Craig, Ada Marjorie.
Craig, Jean Agnes.
Crate, Alma.
Crawford, Alice Victoria.
Creamer, Mary (Sr. M. Ruth).
Crerar, Elizabeth H.
Cullis, John T.
Cummiford, Edith Marguerite.
Cumming, Alma B.
Cumming, Edna J.
Cunningham, Hildegarde.
Curl, Eleanor M.
Curran, Teresa Peryle.
Currie, Thirza A.
Currie, Violet.
Currier, Josephine A.
Curry, Barbara E.
Curtis, Ruth.
Dale, Jeanette I.
Dale, Verlyn L.
Dane, Margaret Alice.
Darroch, Jean Ruth.
Davidson, Clara Effie.
Davies, Sadie Jeanne.
Davis, Angeline Maud.
Davis, Hazel I.
Davis, Myrtle Frances.
Davis, Ruth Nerta.
Dawson, Mabel J.
Dawson, Robert Parker.
Day, Cyrus Fowler.
Dean, Gladys Bernice Ruth.
Deane, Edith M.
Deegan, Judith Mary.
Demill, Marjorie.
Denike, Eva G.
Dennis, Edna May.
Deslauriers, Ada E.
Devine, Miriam A.
Dewan, Alice B.
Deyell, Mary Agnes.
Dillon, Mary Pauline.
Dinsmore, Inez E.
Dobbin, Clara B.
Dobie, Isabel Elliott.
Doerbecker, Luella M.
Dohn, Lavina Alberta.
Dohnan, Kathleen Mae.
Donaldson, Vesta A. M.
Dougall, Dorothea Eleanor.
Dougherty, Eleanor F.
Dowler, Alice Marion.
Downes, Teresa Agnes Marie.
Downey, Marie Theresa.
Doyle, Kathleen.
Drinkwalter, Ina N. A.
Dudgeon, Lillian.
Duetta, Blanche G.
Duff, Ida Mary.
Duncan, Jennie B.
Duncan, Rachel Irene.
Duncliffe, Nellie.
Dunham, Jessie Irene.
Dunn, Mary C. (Sr. M. Audry).
Dunnett, Helen Gertrude.
Dunnigan, Margaret (Sr. M. Victor).
Durant, Arlie Beatrice.
Durnin, Mary M.
Eagan, Edna M.
Eaton, Mary Adelaide.
Edwards, Doris L.
Edwards, Florence Elizabeth.
Edwards, Laura Jean.
Ego, Frances Donalda.
Ehlers, Mina.
Eidt, Beatrice W.
Elder, Ella H.
Elder, Sarah I.
Elliott, Marjorie Isabel.
Elliott, Beatrice A.
Elliott, Ella V. (Mrs.).
Elliott, Margaret Jean.
Elliott, Pearl I.
Emack, Beatrice Annie.
Englert, Bertha (Sr. M. LaSalle).
English, Lottie.
Erskine, Winnifred E.
Evans, Cora I.
Everitt, Anna M.
Fanning, Clare (Sr. St. Jane Frances).
Farnham, Helen L.
Farrell, Anna.
Farrow, Frances Irma.
Felker, Olive M.
Fennell, Mary B.
Fennell, M. Florence.
Fenton, Mary.
Ferguson, Annie Catherine.
Ferguson, Susie M.
Fetterley, John Clinton.

VII. Permanent Second Class Certificates.—Continued.

Fewster, Annie G.
Field, Harry W.
Field, Narissa Marguerite.
Fieldhouse, Bessie V.
Finch, Alice M.
Findlay, Alma L.
Finkbeiner, Almeda.
Finlayson, Mamie Elizabeth.
Fisher, Hester Alberta Muriel.
Fisher, Jean Isabel.
Fitchett, Etta V.
Flannigan, Mary T.
Fleming, Mary Edna.
Flood, Edna Irene.
Flynn, Joy.
Foley, Anna Veronica.
Foley, Ruby V.
Ford, Annie Fern.
Ford, Elizabeth L.
Ford, Ella M.
Ford, Isabel.
Ford, Leila E.
Forestell, Florence (Sr. M. Maureen).
Foster, Annie May.
Foster, Hazel E.
Foster, Kate.
Foster, Myrtle S.
Fowlie, Dorothy I.
Fraser, Florence Ruth.
Frayn, Mary E.
Fretz, Joseph C.
Fuller, Bessie E.
Galvin, Mary Edna.
Gamble, Leita Margaret.
Gannon, Beatrice V. M.
Gardiner, Elizabeth.
Gardiner, Mae Allen.
Gardner, Alice Zelba.
Garvin, Evelyn (Sr. St. Thomas).
Garvock, Bessie H.
Gebhardt, Hilda E.
Geddes, Wilmer Nelson.
Gerber, Mary J.
Ghent, Mervin.
Ghent, Ruth E.
Gibson, Edith Adeline.
Gilbert, Hazel Ivey.
Gilchrist, Katherine Elizabeth.
Giles, Alice W.
Giles, Mildred P.
Gillespie, Georgina.
Gillespie, Lillian S.
Gillespie, Lulu Elizabeth.
Gillies, Clarence.
Gilmore, Vera Elsie Margaret.
Gilmour, Florence H.
Girouard, Annie A.
Giroux, Corinne.
Gleeson, Nora M.
Glover, Geraldine R.
Godin, Muriel M.
Goldring, Marjorie Anne.
Goodwin, Grace M.
Goodrow, Blanche M. (Sr. M. St. Rita).
Gordon, Annie J.
Gordon, Irene.
Gore, Daisy A.
Goss, Meda G.
Gott, Hazel Bell.
Gott, Irene Florence.
Gove, Arletta Estella.
Graham, Beulah G.
Graham, Gladys B.
Graham, Jean M.
Graham, Marguerite E.
Graham, Vera May.
Gray, Annie.
Gray, B. Jean.
Gray, Mary.
Greer, Winnifred.
Gregory, James F.
Greig, Beatrice S.
Guenther, Euloeen V.
Gullett, Donald Werden.
Gunn, Mae Winnifred.
Haggerty, Louise E.
Haig, Helen L.
Hall, Gladys J.
Halliday, Edna L.
Halnan, Gladys Beatrice.
Hamil, Mildred C.
Hamilton, Bertha.
Hamilton, Ethel C.
Hamilton, Iva M.
Hamilton, Joyce Gertrude.
Hamilton, Laura Elva.
Hammell, Margaret M.
Hammersley, Christina.
Hampel, Florence E.
Hampson, Dorothy.
Haney, Mary Myrtle.
Haney, Reta.
Hanna, Effie Lartar.
Hannam, Herbert Henry.
Hannan, Marcia M.
Hardy, Grace B.
Hardy, Mila.
Hare, Robert Rossington.
Hargrave, Mabel (Mrs.).
Hargrave, Ruth P.
Harley, Ada M.
Harper, Marjorie Ann.
Harrett, Ella V.
Harris, Byrdie M.
Harris, Mary Margaret.
Harrison, Edna C.
Harrison, Edna M.
Hart, Jean Isabel.
Hart, Jessie.
Hartley, Ellen.
Hartley, Iveagh.
Harvey, Helen Harriett.
Hastings, Flora.
Hauch, Julia M.
Hawn, Mabel.
Hay, Hazel M.
Hay, Jean Elizabeth.
Haycock, Laura.
Hayes, Anastasia.
Hayes, Bertille.
Hayes, Irenaeus.
Hayes, Ruby.
Healey, Gladys.
Hearn, Harriet Laura.
Heaslip, Clara R.
Heffernan, Helena A.
Helm, Herbert J.
Henderson, Elsie I.
Henry, Annie Elizabeth.
Henry, Anna L.
Henry, Mary.
Henry, Myrtle.
Herbert, Colette Agnes.
Heron, M. Violet.
Herridge, Marguerite.
Hess, Ina Fern.
Hetherington, Nyhl V.
Heuermann, Anna (Sr. M. Solania).
Hewins, Merle.
Hewish, Marjorie R.
Hewitt, Clara M.
Heydon, Clara.
Heyrock, Elva Mae.
Hick, Florence Margaret.
Hicks, Alice L.
Hicks, Jessie M.
Hickson, Amy Pearl.
Hilborn, Fannie H.
Hilliard, Delight.
Hilliker, Hope A.
Hindman, Clarinda.
Hipwell, Ruth.
Hoar, Jessie Mileta.
Hobbs, Mary Ann.
Hogg, Etta May.
Hoggarth, Annie.
Holdsworth, Marguerita Pauline.
Holland, Vivian V.
Hollingsworth, Bertha.
Hollingsworth, Elizabeth Maude.
Holmes, Eleanor Marguerite.
Holmes, Grace M.
Holmes, Helen Margaret.
Holmes, Laura.
Hope, Bertha Sophia.
Horan, Mary E.
Horn, Eva G.
Howe, Martha.
Howell-Evans, Frances (Mrs.).
Howse, Edith Mildred.
Hubbert, Frankie O.
Hudson, Susannah J.
Hume, Mary Agnes.
Humphrey, Ethyl Martha.
Hunt, Marjorie M.
Hunter, Chester Harold.
Hunter, Marguerite Kathleen.

VII. Permanent Second Class Certificates.—Continued

Hutchinson, Cora M.
Hutton, Mary E.
Hutty, Mary Edna.
Huycke, Marjorie.
Hyatt, Eunice B.
Ingram, Kathleen A.
Ireland, Lillian Gwendolyne.
Irving, Dorris Lillian.
Irving, Marie Irene.
Irwin, Jack L.
Irwin, Vera M.
Irwin, William R.
Jack, Hazel I.
Jackson, Ethel B.
Jackson, Freda Mary.
Jackson, Harold McGill.
Jackson, Hattie Bell (Mrs.).
Jackson, Vera.
Jalbert, Adelaide L.
James, Annie.
Jamieson, Grace.
Jamieson, Mary Helena.
Jamieson, Mary Moffatt.
Jeacock, Myrtle L.
Jeffery, Pearl E.
Jeffrey, Inez M.
Jelly, Margaret Grace.
Johnson, Edith H.
Johnson, Elsie Bell.
Johnston, Beulah.
Johnston, Harriet M.
Johnston, Theresa J.
Johnstone, Della.
Jolly, Beatrice M.
Jolly, Jean Elizabeth.
Jones, Margaret R. C.
Jordan, Laura A.
Joyce, Gladys.
Joynt, Mary H.
Junkin, Evelina.
Kaiser, Della B.
Keepin, Ivie E.
Keetch, Lillian.
Kelley, Irene May, B.A.
Kells, Gladys E.
Kelly, Josephine F.
Kelly, Margaret.
Kelly, Mary E.
Kelly, Nina.
Kelso, Bessie C.
Kennedy, Katie Rosella.
Kennedy, Marguerite.
Kenyon, Laura.
Kerby, Matilda L.
Kernohan, Valetta La May.
Kerr, Margaret Irene Isabel.
Kerr, Violet M.
Kerruish, Mona Havergald.
Kerwin, Julia Anna.
Keys, Beulah Irene.
Kidd, Beulah Belle.
Kidd, Myrtle Almeda.
Kidd, Rose L.
Kidney, Gertrude M.
Kimmerly, Vera Muriel.
Kincaid, Selena G.
King, Margaret E.
Kinkead, Sadie E.
Kirk, Annie H. M.
Kirkpatrick, Ethel May.
Kiteley, Edith M.
Knisley, Isabelle.
Knowles, Annie O.
Kormann, Mary (Sr. M. St. Gregory).
Kraft, Emma B.
Kron, Esther E.
Laidlaw, Bessie.
Lajeunesse, Camilla M. (St. M. of Carmel).
Lamont, Elizabeth R.
Lancaster, Muriel I.
Lang, Agnes M.
Lang, Nora Jean.
Langley, Eva V.
Lansing, Margaret M. M.
Large, Mary Wilhelmina.
Larkworthy, Charlotte.
Laughlin, Norman J.
Lavelle, Lila M.
Law, Emily Pearl.
Lawrence, Hattie Ila.
Lawrence, Mary Rose.
Lawson, Anna Helen.
Lawton, Lily Mae.
Laybourne, Olive Aldrich.
Leathorn, Freda.
Ledger, Clara.
Leduc, Leocadie.
Lee, Norma Eileen.
Lehman, Mildred R.
Leighfield, Estella.
Leitch, Mary.
Leslie, Nina Maude.
Lester, Beatrice.
Leversage, Olive Muriel.
Lewis, Catherine Vera.
Lewis, Edgar.
Lewis, Etta P.
Limon, Annie M.
Linton, Irma Evelyn.
Little, Elva M.
Little, Kenneth C.
Livingstone, Eliza.
Lloyd, Ethel J.
Locke, Lillian Gladys.
Lockwood, Lillian.
Logan, Kathleen H.
Longland, Anna Elsie.
Loucks, Mary Helen.
Louden, Nell E.
Love, Rena Elizabeth.
Lowes, Marjorie Bertha.
Lowry, Gertrude.
Lowry, Marjorie A.
Luard, Evelyn M.
Luckens, Ethel Eunice.
Luke, Florence M.
Lundy, Louise H.
Lunn, Gladys A.
Luxon, Annie Margaret.
Lyle, Margaret E.
Lyon, Elsie Hilda.
MacAlpine, Annie.
MacAlpine, Elizabeth M.
Macarthur, Daisy.
MacArthur, Florence A.
MacArthur, Mayme Alberta.
MacCallum, Jeanette.
Macdiarmid, Annie Margaret.
Macdonald, Alicia G.
Macdonald, Annie.
MacDonald, Annie M.
MacDonald, Edith A.
Macdonald, Florence.
MacDonald, Nellie V.
MacEwen, Isabel M.
MacGregor, Marguerite E.
MacIntosh, Florence Lilian.
MacIntyre, Margaret M.
Mackay, Christina.
MacKay, Helen W.
Mackay, Janet.
MacKay, Katie Jane Anne.
MacKay, Marjorie Cecil.
MacKay, Maude Irene.
MacKay, Mayme F.
MacKay, Rose E.
Macklin, Cecelia Evelyn.
MacLean, Ella Mae.
MacLeod, Annabel Agnes.
MacMillan, Eva A.
MacMillan, Grace A.
MacMillan, Mildred M.
Macmillan, Rachael.
Macpherson, Annie V.
MacVicar, Lily B.
Mainer, Vivian M.
Mainprize, Jennie B.
Mair, Dorothy Marion.
Malott, Alta M.
Malott, Utah.
Mancely, Margaret Helen.
Marcellus, Merian G.
Markell, Jennie A.
Markle, Gladys Irene.
Marlin, Sadie V.
Marshall, Ida M.
Marshall, Pearl Marie.
Martin, Florence M.
Martin, Marjorie R.
Mason, Grace Elizabeth.
Mason, Ida Victoria.
Massie, Muriel.
Masterson, Anna Lavearn.
Maude, Bernice Florence.
Mayhew, J. Isobel.
McAdam (James) Douglas.
McAsh, Eleanor.
McBride, William Hay.
McBroom, Gladys.
McCabe, Ella A.
McCallum, Della Louise.
McCann, Ruby E.
McCauley, Eva.
McClelland, Emma E. L.
McClelland, Louisa A.

VII. Permanent Second Class Certificates.—Continued

McColl, Jeannette.
McConaghy, Margaret E.
McCormick, Gladys A.
McCormick, Jane.
McCort, Eveline T.
McCuaig, Elizabeth M.
McCullough, Ella May.
McDermott, Helen Kathryn.
McDonald, Anna I.
McDougall, Agnes E.
McDowell, Ethel.
McDowell, Gladys.
McEachern, Katherine Anne.
McEachren, Bessie.
McFarlane, Helen J.
McGill, Ada Luella.
McGill, Edith M.
McGinness, Adelaide.
McGinnis, Stella Pearl (Mrs.)
McGowan, Rebecca Dixon.
McGregor, Jessie M. (Sr. M. St. Austin).
McGugan, Malena.
McHolm, Lila L.
McHugh, Elizabeth (Sr. Ernestine).
McIroy, Marjorie Elsie.
McIntosh, Arlie J. A.
McIntyre, Marguerite.
McIntyre, Margaret I.
McIntyre, Marguerite A.
McKay, Ella I.
McKay, Lulu E.
McKechnie, Ethel H.
McKenzie, Ena.
McKeown, Evelyn.
McKibbon, Bessie Ethel.
McKibbon, Hazel I. (Mrs.).
McKim, Martha Elva.
McKnight, Ethel R.
McKnight, Maggie L.
McLaren, Alma Isabel.
McLaughlin, Flossie Gertrude.
McLean, Le Eden Vivian.
McLeish, Grace J.
McLeod, Norman.
McLuhan, Helen Marion.
McManus, Ada Lilian.
McMaster, Annie Marg't.
McMaster, Annie M.
McMillan, Ella Mary.
McMillan, Jennie E.
McMillan, Oral M.
McNabb, Agnes J. A.
McNair, Agnes I.
McNally, Hildegarde Mary.
McNeill, Dorothy M.
McNeilly, Constance Kathleen.
McRae, Flossie M.
McRae, Jessie.
McRae, Pearl V.
McTavish, Jessie M.
McVannel, Grace M.
McVicar, Donald H.
McVicar, Winifred.
McWaters, Maurieta C.
Meek, Annie H. G.
Meek, Isobel.
Meiklejohn, Sylva Marie.
Mellish, Irene Lillian.
Merkley, Martha Ella.
Merkley, Melvina G.
Merrison, Mary Jane.
Metcalfe, Annie Pearl.
Meyer, Marcella (Sr. M. Gabriel).
Middleton, Nettie Ella.
Millar, Bessie A.
Miller, Annie B.
Miller, Hazel G.
Miller, Mary Alice.
Miller, Maud.
Miller, Minnie Matilda.
Milner, Lauretta Marguerite.
Minns, Bruce R.
Minns, Lillian M.
Minter, Dorothy Marguerite.
Mitchell, E. Marguerite.
Mitchell, O. Bella.
Mitchell, Viola Janet.
Monteith, Beryle Elizabeth Carlyle.
Monteith, Erma Mary.
Monteith, Louise.
Montgomery, Edythe Viola.
Montgomery, Ila L.
Moore, Edna Marion.
Moore, George Oliver Elgin.
Moore, Sadie Beatrice.
Moore, Violet M.
Moran, Mabel E.
Morgan, Violette M.
Morrison, Mae Agnes.
Morrison, Margaret Ann.
Morrison, Margaret M.
Mossey, Olive.
Mossop, Mildred.
Muir, Lottie.
Mulloy, Mary D.
Munro, Joseph Erle Redmond.
Munroe, Muriel D.
Murchison, Effie.
Murphy, Agnes.
Murphy, Helena Margaret.
Murphy, Mary A.
Murray, Adeline A.
Murray, Agnes Helena Christie.
Murray, Bessie R.
Murray, Jessie Helen.
Murray, Lena D.
Murray, William C.
Muterer, Margaret.
Nablo, Pearl M.
Nairn, Laura I.
Nash, Eva May.
Needham, Ira James.
Neelin, Reta L.
Neely, Margaret E.
Nelson, Lela G.
Nelson, Lily May.
Nelson, Maccie M.
Newton, Wanda Mildred.
Ney, Arthur William.
Nichol, Martha J.
Nixon, Minnie Laurena.
Nixon, Rachel A.
Noonan, Mary Veronica.
Northey, Mabel Z.
Northey, Myrtle C.
Noxon, James B.
O'Brien, Alicia K.
O'Donoghue, Madeline A.
O'Hara Kathryn (Sr. M. Sheila).
O'Hara, Stella M.
Olson, Emma Maria.
O'Meara, Jenny Margaret.
O'Neil, Sarah Vivian.
O'Neill, Dora Patricia.
Orchard, Dorothy E.
Orr, Stella.
O'Shaughnessy, Anastasia.
Ower, Hilda Young.
Ower, Hira MacT.
Pack, Mary O.
Paget, Clara Z. (Mrs.).
Palleck, Juliana E.
Park, Mary I.
Park, Vera Leila.
Parks, Muriel.
Parks, Victoria G.
Parliament, Florence W.
Parr, Evelyn.
Parrott, Minerva Luella.
Parsons, Reginald.
Partridge, Celia.
Paterson, Kathryn Sherwood.
Patterson, Annie.
Patterson, Pearl Elizabeth.
Patton, Tillie A.
Paxton, Eunice Marion.
Payne, Minnie J.
Peacock, Olive Mildred.
Pearson, Valetta I.
Pearson, Vernie Irene.
Penner, May.
Peria, Annie M.
Perry, Phyllis Marian.
Perryman, Olive Jean.
Person, William J.
Peters, Margaret E. A.
Peterson, Mary E. (Mrs.).
Petty, Selina Grace.
Phalen, Anna A.
Phelps, Lois E.
Philip, Nellie Bryce.
Pickering, Edna V.
Pigott, Martina Genevieve.
Pinder, Edna Myrtle.
Pinkney, Alma F.
Playfair, Marion Elizabeth.
Plewes, Ida Maude.
Poapst, Beryl.

VII. Permanent Second Class Certificates.—Continued

Pollock, Ruby E.
Porteous, Alma J.
Potter, Clara G.
Price, Annie Alberta.
Prouse, Dorothea Elizabeth.
Purdy, Dessie M.
Quesnel, Louise.
Quin, Mary M.
Rathwell, Loreto.
Rayburn, Sadie Belle.
Real, Bernadette (Sr. M. F. Clare).
Redmond, Violet E.
Reed, Gladys Emma.
Reid, Clara G.
Reid, Cora B.
Revell, Lillian I.
Richmond, Edna M.
Richmond, Lillian K.
Riddell, Jean M.
Riddell, Vera Isabel.
Rintoul, Olive M.
Risdill, Harriet A.
Ritchie, Thomas Harold A.
Roach, Iva.
Roadhouse, Olive E.
Robb, Marion A.
Robb, Mildred J.
Robb, Minnie W.
Roberts, Eva Winniford.
Roberts, Sarah Luella.
Robertson, Ethel V.
Robertson, Elsie Christina.
Robertson, May.
Robins, Merle Louise.
Robinson, Annie T.
Robinson, Bertha A.
Robinson, Ethel M.
Robinson, Greta O.
Robinson, Helen Elizabeth.
Robinson, Jean I.
Roche, Ruby E.
Rodaway, Helen.
Rogers, Ethel A.
Rogers, Gertrude.
Rogers, Gladys M.
Rorke, Elda J.
Ross, Esther Jane.
Ross, Hilda M. G.
Ross, Kathleen Mildred (Mrs.).
Ross, Lulu.
Rothwell, Martha Alice.
Rowan, Ada Pearl.
Rowan, Lila M.
Rudolph, Cecil Reuben.
Russell, Elva I.
Russell, Ethel B.
Rutherford, Eva M.
Rutherford, Margaret T.
Ruttan, Minnie Elva.
Ryder, Eileen May.
Ryley, Alice Elizabeth.
Rymal, Hilda B.
Sandham, Erie L.
Sarjeant, Ruby Maurine.
Scammell, Florence J.
Scharf, Elisha Forrest.
Scheifle, Hilda Emily.
Schmidt, Nelda.
Schofield, Mary Melissa.
Schofield, Margaret Azore.
Schram, Georgia Donalda.
Scruton, Muriel Fern.
Seabrook, Mary Verona.
Seavey, Marjorie G.
Secor, Edith Roselia.
Secord, Laura Blanche.
Shanahan, Anna V.
Shane, Gladys Jean.
Shannette, Jennie Eleanor.
Shannon, Elizabeth.
Sharpe, Mary Beatrice.
Sharpe, Violet.
Sheane, Mary Ruth.
Sheffield, Miriam.
Sheppard, Laura L.
Shiels, Margaret.
Shipman, Blanche M.
Shortt, Margaret G.
Shufelt, Canzadia Louise.
Shunk, Hazel Irene.
Shuttleworth, Elsie A.
Siegner, Gertrude.
Silcox, Blanche I.
Simons, Agnes S. M.
Simpson, Edythe Mae.
Simpson, Greta Rose.
Sims, Alice Elizabeth.
Sims, Edna.
Sims, Mildred L.
Sims, Rita.
Simson, Margaret Melrose.
Singleton, Marion Emma.
Sisson, Mildred
Skilling, Norma A.
Skippon, Elva Dixon.
Slade, Edna Gertrude.
Sliter, Lottie M.
Sloan, Hazel M.
Sloan, Mary H.
Smart, Agnes Belle.
Smiley, Rose Evelyn.
Smith, Dorothy F.
Smith, Eileen Ross.
Smith, Ethel.
Smith, Greta J.
Smith, Hazel B.
Smith, Jennettie Rowena.
Smith, Lavina V.
Smith, Lottie J.
Smith, Ruby.
Smith, Ruth M.
Smith, William Everton.
Smithson, Daisie A.
Snelgrove, Winifred V.
Somers, Irene M.
Somerville, Eva Henderson.
Sotheran, Ruth Evelyn Strathy.
Southern, Sadie E.
Sparks, Helen Esther.
Speers, Mildred.
Speight, Rossa.
Spence, Josepha G.
Spence Margaret.
Spragge, Doris L.
Stalker, Mary S.
Standing, Vera.
Stephens, Llewellyn Earle Roy.
Stephenson, Florence G. B.
Stevenson, Lottie Beryl.
Steward, Mary.
Stewart, Florence I.
Stewart, Gladys.
Stewart, Gordon Lachlan.
Stewart, Muriel A.
Stewart, Ruth M.
Steckle, Ellen.
Stickney, Alma Ruby.
Stinson, Blanche Wilhelmine.
Stinson, Elsie C.
Stinson, Greta M.
Stirtzinger, Ina L.
Stonehouse, Margery Lawrence.
Story, Helen M.
Stothers, Rae J.
Strachan, Dorothy.
Strickland, Agnes.
Stringer, Mary J.
Stroh, Annie Ellen.
Strunk, Eleanor (Sr. M. Jerome).
Sturgeon, Eliza Marguerite.
Sullivan, Annie C.
Sullivan, Patricia.
Sumler, Marjorie Helen.
Sutherland, Georgina Fredericka.
Sutherland, Nina C.
Sutton, Mary Isabel.
Swain, Margaret Anetta.
Swayze, Madeleine Vera.
Swayze, Violet Ann.
Sweetnam, Herbert Carman.
Swetman, Elizabeth Kathleen.
Switzer, Edna Alice.
Switzer, Melva Hattie.
Syer, Isobel Beatrice.
Tait, Olga Marguerite.
Tate, Emily Elizabeth.
Tate, Harry Elgin.
Taylor, Ella M.
Taylor, Florence A.
Taylor, Hazel L.
Teasdale, Linda.
Terry, Melba F.
Teskey, Elsie Maud.
Theaker, Edith Sarah.
Thomas, Frances E.
Thompson, Gladys Robina.
Thompson, Mona B.
Thompson, Pauline Ardus.
Thompson, Susie Hurst.
Thomson, Agnes H.

VII. Permanent Second Class Certificates.—Continued

Thomson, Barbara I.
Thomson, Marguerite.
Thorburn, Daisy A.
Thorne, Zella E.
Tieman, Emma Pearl.
Tiffin, Valetta M.
Tinkess, Bertha G.
Tobin, Ella G.
Tobin, Mary Theresa.
Todd, Beatrice Elizabeth.
Tolton, Anna May.
Toohey, Mary C.
Tooke, Maggie.
Traver, Nellie M.
Travis, Ruth.
Tuck, Gladys E.
Tuck, Margeretta E. A.
Tuck, Rosa E.
Tufts, Edith M.
Tummon, Bertha.
Tunney, Ann Caecelia.
Turner, Annie Gertrude.
Turner, Margaret Esther.
Tweddle, Helen Richardson.
Twietmeyer, Gertrude.
Upton, Merrell Agnes.
Uren, Sadie E.
Urquhart, Cassie.
VanCamp, Adessa M.
Van de Water, Otha.
Van Horne, Grace.
Van Sickle, Gladys R.
Waddell, Norma C.
Waddell, Wilfrid H.
Waddick, Marie V.
Wade, Beatrice S.
Wahl, Edith.
Waite, Gladys.
Walker, Edith E.
Walker, Gwyneth Evelyn.
Walling, Viola M.
Wallington, Mabel Fern.
Walpole, Mabel F.
Walsh, Callista Kathleen.
Walters, Grace.
Wanless, Isabel C.
Ward, Mary Evelyn.
Ward, Myra Olive.
Warden, N. (Mrs.).
Warnica, Mabel Ethel.
Warnock, M. Lena.
Warren, Leafa I.
Watson, Eloise M.
Watson, Emily G.
Watters, Katie (Sr. M. St. Bride).
Wannamaker, Ruth C.
Weaver, Meroe Adelaide.
Weber, Lilian Ladysmith.
Webster, Amy L.
Webster, Mary.
Webster, Ruby Luella.
Weiler, Marie.
Wells, Blanche I.
Wells, Dorothy B.
Welsh, Catherine B.
Welsh, Susie E.
Wenzel, Grace A.
Westman, Marjorie.
Whalen, Anne (Sr. M. Rose of Viterbo).
White, Florence M.
White, Harriet U.
White, William E.
Whitelock, Sarah Elizabeth.
Whitfield, Lydia.
Whitman, Grace Eva.
Widmayer, Meata D. E.
Wight, Mabel Loretta.
Wilkin, Lena Edna.
Williams, Lenora E.
Williams, Luella K.
Williams, Rosslyn F.
Williamson, Ethel May.
Williamson, Stella V.
Willson, Minnie Loreen.
Wilson, Annie Muriel.
Wilson, Evelyn M.
Wilson, Lelond D.
Wilson, Mary Evelyn.
Wilson, Muriel I.
Wilson, Winifred I.
Winhold, Erna.
Wittet, Bessie M.
Wood, Gladys Margaret.
Woodhall, Anna L.
Woodhouse, Elizabeth A.
Wright, Margaret Thorburn.
Wright, Wilhelmina I.
Wyatt, Sadie H.
Yeomans, Olive A.
Young, Winifred C.
Yuill, Percy W. T.

VIII. Permanent Kindergarten-Primary Certificates

Brown, Hilda C.
Carter, Imogen M.
Cook, Elizabeth S.
Flater, Marjorie.
Fleming, Lilian.
Gillespie, Ada F.
Harvey, Anna V.
Howson, Helen.
Ireland, Helen R.
Keeler, Helen M.
Limin, Freda S.
McLean, Mary I.
McQueen, Sadie C.
Richardson, Ethel M.
Rieder, May.
Robinson, Muriel.
Rush, Lillian H.
Teasdall, Mary E.
Tighe, Marion C.
Woolley, Helen J.

IX. Permanent Kindergarten Directors' Certificates

Armstrong, Louise.
Chamberlain, Mamie A. V.
Gillrie, Alma M.
MacKenzie, Verna M.
McFarlane, Jean.
Muller, Rhoda A.
Rowntree, Marjory.
Scott, Alice M.
Wade, Ruth A.
Watson, Myrtle E.

X. Manual Training Certificates

Permanent Ordinary.

Ellis, Victor A.
Medcof, John D.

Permanent Specialist.

Gee, John A.
White, Samuel R.

XI. Household Science Certificates

Permanent Ordinary.

Cockburn, Marguerite L.
Culver, Clara C.
Glasgow, Marion I.
Graham, Grace E.
Johnson, Marjorie M.
Kennedy, Catherine A.
Learoyd, Alma M.
Pilkey, Helene M. B.
Scott, Mary N.
Sinclair Mae L.

Permanent Specialist.

Clerke, Mary E., B.A.
Kendall, Sybel M., B.A.

XII. Professional Certificates, 1920

—	No. of Candidates	Extra Mural Students	High School Permanent Certificates	High School Interim Certificates	Permanent Provincial First Class Certificates	Interim First Class Certificates	Permanent Second Class Certificates	Interim Second Class Certificates	Limited Third Class Certificates, valid for five years	District Certificates, valid for one or two years	Extended District Certificates (Academic Course)	Total number of Certificates
Faculties of Education	399	56	.....	114	.....	197	....	58	.....	.....	.....	369
Normal Schools	1205	152	.....	....	.....	....	....	1150	89	.....	.....	1239
Autumn Model Schools	62	10	.....	....	.....	....	....	....	69	1	.....	70
English-French Model Schools	123	3	.....	....	.....	....	....	....	50	.....	.....	50
Summer Model Schools	270	4	.....	....	.....	....	....	....	*58	118	84	260
Certificates issued on *pro tanto* standing	....	....	.....	....	.....	....	....	9	12	.....	.....	21
†Interim First Class Certificates, issued on reaching 20 years of age	53	....	.....	....	.....	53	....	....	.....	.....	.....	53
Interim Certificates made permanent	....	....	198	....	179	....	1165	....	.....	.....	.....	1542
Total number of newly certificated teachers	....	....	.....	114	.....	197	....	1217	220	119	.....	1867

*These previously held District Certificates.

†These previously held Interim II Class Certificates.

Household Science

Number of Interim Ordinary Certificates	27
Number of Interim Specialist Certificates	2
Number of Permanent Ordinary Certificates	10
Number of Permanent Specialist Certificates	2

Manual Training

Number of Interim Ordinary Certificates	35
Number of Interim Specialist Certificates	3
Number of Permanent Ordinary Certificates	2
Number of Permanent Intermediate Certificates	0
Number of Permanent Specialist Certificates	2

Kindergarten Certificates

Number of Interim Kindergarten-Primary Certificates	23
Number of Permanent Kindergarten-Primary Certificates	20
Number of Kindergarten Directors' Certificates	10

Physical Culture Certificates

Number of Interim Elementary Physical Culture Certificates (Faculty of Education)	88

Summer School Certificates

Elementary Agriculture and Horticulture (Interim)	187	Elementary Commercial Subjects (Interim)	5
Intermediate Agriculture and Horticulture (Interim)	25	Specialists in Commercial Subjects (Interim)	2
Intermediate Agriculture and Horticulture (Permanent)	8	Farm Mechanics (Interim)	7
Elementary Art (Interim)	82	Elementary Household Science	33
Supervisors in Art (Interim)	21	Kindergarten-Primary (Interim)	65
Specialists in Art (Interim)	27	Elementary Manual Training (Interim)	11
Auxiliary Classes (Interim)	4	Elementary Vocal Music (Interim)	51
		Supervisors in Vocal Music (Interim)	12
		Elementary Physical Culture (Interim)	52
		Supervisors in Physical Culture (Interim)	75
		Specialists in Physical Culture (Interim)	43

NOTE—In addition to the above, twenty-five Interim Certificates in Elementary Physical Culture were granted on *pro tanto* standing.

XIII. Temporary Certificates Issued in 1920

Inspectorates	Number during 1st half year	Number during 2nd half year	Inspectorates	Number during 1st half year	Number during 2nd half year
Brant and Norfolk, N.	3	1	Renfrew, S	4	7
Bruce, E.	5	6	Simcoe, E.	3	1
Carleton, E	4	4	Simcoe, N.	2	1
Carleton, W. & Lanark, E.	13	26	Simcoe, S.	4	.....
Dufferin	3	.....	Stormont	1	.....
Dundas	.....	2	Victoria, W	5	3
Elgin, E.	1	.....	Waterloo, S (No. 2)	1	.....
Essex, S.	3	.....	Welland, N.	1	.....
Frontenac, N. & Addington.	20	50	Wellington, S	1	.....
Frontenac, S.	14	19	York, E.	1	.....
Glengarry	3	4	York, N.	2	1
Grey, E.	1	4	York, W	1	.....
Grey, S.	.....	1			
Grey, W	4	5	District Divisions:		
Haldimand	1	1	No. I	9	11
Hastings, Centre	5	4	No. II	1	.....
Hastings, N.	5	8	No. III	10	6
Hastings, S.	3	4	No. IV	6	9
Kent, W.	4	.....	No. V	2	2
Lambton, W. (No 1)	2	.....	No. VI	24	25
Lanark, W.	12	16	No. VII	9	12
Leeds and Grenville, No. 1.	6	1	No. VIII	9	14
Leeds and Grenville, No. 2	.....	4	No. IX	9	19
Leeds and Grenville, No. 3.	7	14	No. X	10	13
Lennox	6	21	No. XI	14	13
Lincoln	1	.....	No. XII	9	29
Middlesex, E.	1	.....	No. XIII	2	.....
Middlesex, W.	1	.....			
Norfolk	2	1	English-French Divisions:		
Northumberland & Durham			No. IA	2	15
West, No. 1	3	1	No. IIA	16	14
East, No. 3	2	6	No. IB	2	3
Ontario, N	1	1	No. IIB	9	.....
Ontario, S	2	2			
Oxford, S.	2	.....	R.C. Separate Sch. Divisions		
Peterborough, E.	10	16	No. I	2	2
Peterborough, W., and Victoria, E.	4	.....	No. III	1	2
Prescott and Russell	9	34	No. IV	2	4
Prince Edward	1	3	No. V	17	42
Renfrew, N.	3	4	No. VI	1	9
			Totals	359	520

APPENDIX U

ORDERS-IN-COUNCIL

Miss Louise F. C. Brill appointed Clerk and Stenographer to Dr. J. B. McDougall, Assistant Chief Public and Separate School Inspector, North Bay. Approved 7th Jan., 1920.

"Middle and Upper School Examinations, 1920" and "Matriculation Examinations, 1920," as contained in Circulars No. 43 and No. 44. Approved 8th Jan.

Agreements with The Copp Clark Company, Limited, respecting the right to print, publish and supply the Ontario Public School Composition and Grammar, and the Ontario High School English Composition for use in the schools of Ontario. Approved 20th Jan.

Mrs. Margaret McKay Sebben appointed Secretary of the Stratford Normal School. Approved 20th Jan.

Agreement with the Macmillan Company of Canada, Limited, respecting the right to print, publish and supply the Ontario Public School History of Canada, and the Ontario Public School History of England, bound in a single volume for use in the schools of Ontario. Approved 27th Jan.

James Sweet appointed teamster at the Ontario School for the Deaf. Approved 27th Jan.

Regulations regarding special provisions for Manual Training and Household Science in rural and village Public and Separate Schools as contained on page 53 of the Amendments to the Regulations of 1918, further amended. Approved 4th Feb.

Agreement with the Macmillan Company of Canada, Limited, respecting the right to print, publish and supply the Ontario High School Physical Geography for use in the schools of Ontario. Approved 20th Feb.

Agreement with The Copp Clark Company, Limited, respecting the right to print, publish and supply the Ontario High School Geometry for use in the schools of Ontario. Approved 20th Feb.

Frank Stewart Rutherford appointed Organizer for the Industrial and Technical Education Branch of the Department. Approved 26th Feb.

Miss Muriel V. Lowry appointed School Nurse of the Department of Education. Approved 2nd March.

Junior High School Entrance and Junior Public School Graduation Diploma examinations and instructions as contained in Examination Circular 87, 1920. Approved 2nd March.

Dr. Harriet McMillan Cockburn appointed Medical Inspection Officer. Approved 3rd March.

Miss Sarah E. Scholefield appointed Nurse in the School for the Blind. Approved 9th March.

Memorandum respecting academic standing for High School Assistants' Certificates, ordinary and specialists. Approved 12th March.

Department and Matriculation Examinations, 1920, as referred to in Circular 41A. Approved 23rd March.

Midsummer examinations, 1919, reports of the associate examiners *re* the character of the candidates' answers and the teaching of the subjects, as contained in Circular 66. Approved 27th March.

Miss E. K. Ballard appointed Secretary of the North Bay Normal School. Approved 30th March.

Miss Gladys Dix, B.A., appointed Secretary and Stenographer to the Deputy Minister of Education. Approved 7th April.

Junior High School Entrance and Junior Public School Examinations, 1920, as contained in Circular 57. Approved 9th April.

Miss Elsie McKim appointed Organizer in the Industrial and Technical Branch of the Department of Education. Approved 22nd April.

Ernest Norgate appointed Engineer at the Ontario School for the Deaf. Approved 26th April.

Empire Day Pamphlet of 1920, entitled "Canadian Citizenship." Approved 4th May.

Revised Edition of Manual Training Manual as printed in 1920. Approved 4th May.

James Scanlon appointed Inspector of English-French Schools. Approved 14th May.

High School established in village of Norwich. Approved 14th May.

Vincent Quarry, B.A., appointed Inspector of Separate Schools. Approved 18th May.

"General announcement of Summer Courses for Teachers, 1920," as contained in Circular 35. Approved 18th May.

Regulations and Courses for the Summer School for School Nurses. Adopted 20th May.

Daniel J. Doyle appointed Fireman at the Ontario School for the Blind. Approved 2nd June.

Text-book Regulations as contained in Circular 14 and the particulars regarding the Departmental Examinations of 1921, as contained in Circular 58. Approved 10th June.

Special list of schools made in accordance with the provisions of regulations 1 (1) (*b*) and (1) (4) of Circular 30½, and as contained in Examination Circular 142. Approved 10th June.

Industrial Schools Amendment Act, 1920, to be in force on, from and after 10th June, 1920. Approved 10th June.

Regulations re Summer Courses amended. Approved 10th June.

Regulations, Courses of Study and Examinations of the Autumn Model Schools, 1920, as contained in Circular 4. Approved 14th June.

Instructions to School Inspectors *re* grants to Public and Separate Schools of the Districts as contained in Instructions 13, and the syllabus of Summer Courses for Teachers, as contained in Circulars 35B, 35C, and 35D. Approved 15th June.

George Whitelaw appointed Special Clerk in the Technical Education Branch of the Department. Approved 18th June.

"New conditions affecting Continuation Schools," as contained in circular of 2nd June, Instructions to School Inspectors re grants to Public and Separate Schools of the counties as contained in Instructions 12; Normal School Regulations and Courses for session 1920-21, Summer Model School Regulations and Courses, 1920, as contained in Circular 4B, and Summer Courses for 1920 for Teachers' Certificates, as contained in Circular 35A, 35E, 35F, and 35G. Approved 28th June.

G. E. Pentland, M.A., appointed District School Inspector for Northern Ontario. Approved 28th June.

Provisions of Circular 19 rescinded and a High School Entrance Revising Board to be selected from Departmental Inspectors. Approved 30th June.

Concerning the coming into force of the Act respecting the School Attendance of Adolescents. Approved 13th July.

Miss B. A. Wilson and Miss S. E. Ward appointed to the teaching staff of the Ontario School for the Deaf. Approved 27th July.

Summer Courses for 1920 for Teachers' Certificates, as contained in Circulars 35H and 35I, and Courses for the English-French Model Schools for 1920-21, as contained in Circular 41½. Approved 27th July.

Miss V. G. Bradly appointed Teacher in the Ontario School for the Deaf. Approved 3rd August.

Miss Helena Lunn appointed School Nurse. Approved 11th August.

Joseph Bechard, B.A., appointed First Assistant on the staff of the Sturgeon Falls English-French Training School. Approved 11th August.

Joseph Lapensee, B.A., appointed Inspector of English-French Schools. Approved 19th August.

Regulations re the Qualifications of holders of First Class Certificates. Approved 24th August.

Miss E. Jean Howell appointed Music Teacher in the Ontario School for the Blind. Approved 31st August.

Examination Circular 44A amended by the addition of Clause 13. Approved 31st August.

Miss A. B. Schofield appointed Domestic Science Teacher and Assistant Matron at the Ontario School for the Deaf. Approved 7th Sept.

Certain temporary appointments made permanent. Approved 7th Sept.

Regulations and Courses of Study of the Normal Schools for First Class Certificates, Session 1920-21. Approved 10th Sept.

A. W. McGuire appointed Assistant Master in the Ottawa Normal Model School. Approved 10th Sept.

Examination Regulations 5 (2), page 41 of the Amendments, amended. Approved 14th Sept.

Dr. S. B. Sinclair appointed Special Lecturer and Inspector of Auxiliary Classes. Approved 17th Sept.

David W. Scott appointed Farmer and Gardener at the School for the Blind. Approved 21st Sept.

Mrs. Muriel G. Sinclair appointed Department Teacher at the Hamilton Normal School. Approved 22nd Sept.

A. J. Park appointed Instructor in Writing at the Hamilton Normal School. Approved 1st October.

Miss M. Lee, Trained Nurse, appointed to the staff in charge of the Medical and Dental Survey of the Schools. Approved 1st October.

Walter Rochett appointed Porter and Messenger at the School for the Blind. Approved 1st October.

John C. Jordan appointed Teacher in the Toronto Normal Model School. Approved 1st October.

G. S. Johnson, B.A., appointed Principal of the Northern Academy, Monteith. Approved 1st October.

John A. Bannister, B.A., appointed English Master at the North Bay Normal School. Approved 5th October.

Miss E. Hunt appointed School Nurse. Approved 5th October.

Agreement with The Copp Clark Company, Limited, respecting the right to print, publish and supply the Ontario Teachers' Manual in Primary Reading. Approved 5th October.

Hilliary B. Tindall appointed Boys' Supervisor at the School for the Blind. Approved 6th October.

Regulations respecting the control and administration of the Northern Academy, Monteith. Approved 12th October.

Agreement with the T. Eaton Company, Limited, respecting the right to print, publish and supply the Ontario Public School Arithmetic. Approved 20th October.

Dr. Chant, of Belleville, appointed Oculist and Aurist in connection with the School for the Deaf. Approved 27th October.

Certain temporary appointments made permanent. Approved 27th October.

P. W. Brown, B.A., appointed District Public School Inspector. Approved 27th October.

Mr. C. F. Lewis appointed Fireman at School for the Blind. Approved 29th October.

F. I. Wharram appointed Engineer at the North Bay Normal School. Approved 4th Nov.

Miss Alice McGlashen appointed Clerk-Stenographer in the Department of Education. Approved 5th Nov.

Miss D. E. Ross appointed Assistant in the Northern Academy, Monteith. Approved 8th Nov.

Members of Board of Examiners for Departmental Middle and Upper School and Matriculation Examinations for 1920-21, appointed. Approved 16th Nov.

Members of the Supervising Board of Examiners for 1920-21 appointed. Approved 16th Nov.

Dr. John T. Phair appointed Chief School Medical Officer. Approved 7th December.

Harry Johnson appointed Caretaker of the Northern Academy. Approved 16th Dec.

Dr. Annabel McEwen appointed Matron and Medical Officer in the Northern Academy. Approved 16th Dec.

Regulations and Courses in Elementary Agriculture and Horticulture, as contained in Circular 13, amended. Approved 20th Dec.

Special provisions for Manual Training and Household Science, as contained in the amendment to the regulations as issued in Circular 34, amended. Approved 22nd Dec.

Miss M. W. Cronk appointed Assistant Teacher in the Northern Academy. Approved 22nd Dec.

N. Stout and N. Doran, Firemen, Thos. Scout, Assistant Engineer, and C. J. Peppin, Engineer, appointed to the staff of the School for the Deaf. Approved 30th Dec.

Dr. F. J. Conboy appointed Chief School Dental Officer. Approved 30th Dec.

Miss E. J. Jamieson appointed Chief School Nurse. Approved 30th Dec.

APPENDIX V

PROVINCIAL NORMAL AND MODEL SCHOOLS

I. Normal School, Hamilton

Staff, January, 1921.

F. F. Macpherson, B.A. ..... Principal: English History, Reading and French.
E. T. Seaton, B.A.Pæd. ..... Master: Mathematics and School Management.
G. O. McMillan, M.A., B.Pæd. ..... Master: Science, Nature Study and Agriculture.
Harold E. Amoss, B.A., D.Pæd. ..... Master: Science of Education, Geography and Hygiene.
H. G. Lockett, M.A. ..... Master: Composition, Grammar, Spelling and Latin.
A. J. Painter ..... Instructor: Manual Training.
Julien R. Seavey ..... Instructor: Art.
Miss Clara E. Elliott ..... Instructor: Household Economics.
H. A. Stares, Mus. Bac. ..... Instructor: Music.
A. J. Park ..... Instructor: Writing.
Miss Beatrice Allan ..... Librarian.

Students admitted, Session 1920-1921

Male	(I Class, 2; II Class, 11)	13
Female	(I Class, 26; II Class, 145)	171
Total		184

II. Normal School, London

Staff, January, 1921.

John Dearness, M.A. ..... Principal: School Management and Science.
A. Stevenson, B.A., B.Pæd. ..... Master: Science of Education and Literature
E. T. White, B.A., B.Pæd. ..... Master: Mathematics and History.
G. W. Hofferd, M.A., B.Pæd. ..... Master: Science and Geography.
T. E. Clarke, B.A., B.Pæd. ..... Master: English.
Sugden Pickles ..... Instructor: Manual Training.
S. K. Davidson ..... Instructor: Art.
Miss A. B. Neville ..... Instructor: Household Economics.
C. E. Percy ..... Instructor: Music.
Albert Slatter ..... Instructor: Physical Culture.
J. W. Westervelt ..... Instructor: Writing.
Miss L. Gahan ..... Librarian.

Students admitted, Session, 1920-1921

Male	(I Class, 2; II Class, 9)	11
Female	(I Class, 26; II Class, 178)	204
Total		215

III. Normal School, North Bay

Staff, January, 1921

A. C. Casselman ..... Principal: History, Reading and Geography
J. C. Norris, M.A., B.Pæd. ..... Master: Mathematics, School Management, and Science of Education.
J. A. Bannister, B.A. ..... Master: Composition, Grammar, and Literature.
H. E. Ricker, M.A. ..... Master: Science, Nature Study, and Agriculture.
J. E. Chambers ..... Instructor: Manual Training, and Writing.
C. Ramsay ..... Instructor: Art.
Miss Mayme C. Kay ..... Instructor: Household Economics.
Herbert Wildgust, L.L.C.M. ..... Instructor: Music.

Students admitted, Session, 1920-1921

Male	7
Female	109
Total	116

IV. Normal School, Ottawa

1. Staff, January, 1921

J. F. White, LL.D. ..... Principal : School Management and English.
W. J. Karr, B.A., D.Pæd. ..... Master : Science of Education and English.
J. D. Campbell, B.A. ..... Master : Mathematics, History, and Hygiene.
G. A. Miller, M.A. ..... Master : Science and Nature Study.
F. A. Jones, M.A., D.Pæd. ..... Master : Grammar, Geography, and History of Education
J. S. Harterre ..... Instructor : Manual Training.
Roy F. Fleming ..... Instructor : Art.
Miss C. E. Green ..... Instructor : Household Economics.
Miss M. G. McEwen ..... Instructor : Household Economics.
T. A. Brown ..... Instructor : Music.
C. Emery ..... Instructor : Physical Culture.
Geo. E. Mabee, B.A. ..... Instructor : Classics to I Class students.
J. M. Fleury ..... Instructor : Moderns to I Class students.
C. J. Logan ..... Instructor : Writing
E. Laura Argue, B.A. ..... Librarian.

Students admitted, Session, 1920-1921

Male	(I Class, 1 ; II Class, 10)	11
Female	(I Class, 11 ; II Class, 163)	174
Total		185

2. Staff of Normal Model School, Ottawa, January, 1921

C. E. Mark, B.A., D.Pæd. ..... Headmaster, V Form, Boys and Girls.
H. M. Leppard, B.A. ..... IV Form, Boys, Sr.
A. W. McGuire, B.A. ..... IV Form, Boys, Jr.
Miss A. M. Delaney ..... III Form, Boys.
Miss Rose Lynch ..... II Form, Boys.
Miss Elsie Sherin ..... I Form, Boys.
Miss A. G. Hanahoe ..... IV Form, Girls.
Miss J. Foster ..... III Form, Girls.
Miss E. Cluff, B.A. ..... II Form, Girls.
Miss M. R. Elliott ..... I Form, Girls.
Miss Lilias M. Henderson ..... Kindergarten-Primary.
Miss A. H. Baker ..... Kindergarten Directress.
Miss Gladys McClenaghan ..... Kindergarten Assistant.
J. S. Harterre ..... Instructor : Manual Training.
Roy F. Fleming ..... Instructor : Art.
Miss M. G. McEwen ..... Instructor : Household Economics.
T. A. Brown ..... Instructor : Music.
C. Emery ..... Instructor : Physical Culture.
J. M. Fleury ..... Instructor : French.

Number of pupils, 1920	350
Number of Kindergarten pupils, 1920	40
Total	390

V. Normal School, Peterborough

Staff, January, 1921

Duncan Walker, B.A. ..... Principal : Mathematics and School Management.
Henry G. Park, B.A., D.Pæd. ..... Master : Science of Education and English.
Adrian Macdonald, M.A. ..... Master : English.
Alonzo J. Madill, B.A. ..... Master : Science and Agriculture.
Elmer E. Ingall, B.A. ..... Master : History and Geography.
A. F. Hagerman ..... Instructor : Manual Training.
Miss Jessie C. McRae ..... Instructor : Art.
Miss Elizabeth MacVannell ..... Instructor : Household Economics.
Miss Marion R. Rannie ..... Instructor : Music and Physical Culture.
John A. McKone ..... Instructor : Writing.
Miss Effie M. Munro ..... Librarian.

Students admitted, Session 1920-1921

Male	13
Female	137
Total	150

VI. Normal School, Stratford

Staff, January, 1921

S. Silcox, B.A., D.Pæd	Principal: Science of Education, and Spelling.
J. W. Emery, B.A., D. Pæd	Master: Science, Nature Study and Agriculture.
J. W. Forbes B.A.	Master: Mathematics, School Management.
H. G. Martyn, B.A.	Master: Grammar, Literature and Reading.
H. G. Manning, B.A.	Master: Composition, Geography, and History.
Sugden Pickles	Instructor: Manual Training.
Mrs. Helen Mayberry	Instructor: Art.
Miss F. McNally, B.Sc	Instructor: Household Economics, and Hygiene.
J. Bottomley, A.R.C.O.	Instructor: Music.
Miss E. M. Cottle	Instructor: Physical Culture, and Writing.
Miss A. J. Johnson	Librarian.

Students admitted, Session 1920-1921

Male	13
Female	189
Total	202

VII. Normal School, Toronto

1. Staff, January, 1921

S. J. Radcliffe, B.A.	Principal: School Management and Literature.
Wm. Prendergast, B.A., B.Pæd	Master: Mathematics and History of Education.
David Whyte, B.A.	Master: Science and Agriculture.
R. H. Walks, B.A.	Master: English.
S. J. Keyes, B.A., B.Pæd.	Master: Science of Education and Reading.
S. J. Stubbs, B.A.	Master: Grammar and Geography.
Miss Mary E. Macintyre	Instructor: Kindergarten Principles.
Miss Ellen Cody	Instructor: Kindergarten Assistant.
Jas. H. Wilkinson	Instructor: Manual Training.
Miss A. Auta Powell	Instructor: Art.
Miss Nina A. Ewing	Instructor: Household Economics.
Miss Gladys M. Breed	Instructor: Household Economics.
A. T. Cringan, Mus. Bac	Instructor: Music.
Miss Miriam Thompson	Pianist.
Mrs. Jean Somers	Instructor: Calisthenics.
Capt. E. H. Price, S. of M.	Instructor: Drill.
A. F. Hare	Instructor: Writing.
Mrs. M. W. Brown	Instructor: Reading.
Miss Jean Merchant	Librarian.

Students admitted, Session 1920-1921

Male	(I Class, 14; II Class, 11)	25
Female	(I Class, 43; II Class, 167)	210
		235
Kindergarten-Primary Students		41
Total		276

2. Staff of Normal Model School, Toronto, January, 1921

Milton A. Sorsoleil, B.A.	Head Master.
Miss M. K. Caulfeild	First Female Assistant.
Thornton Mustard	First Male Assistant.
Miss A. F. Laven	Assistant.
Francis M. McCordic	Assistant.
Miss C. E. Kniseley	Assistant.
John E. Montgomery, B.A.	Assistant.
Miss Jessie I. Cross	Assistant.
John C. Jordan	Assistant.
Miss Isabella Richardson	Assistant.
Miss Alice A. Harding	Assistant.
Miss Lilian B. Harding	Kindergarten-Primary.
Miss Mary E. Macintyre	Kindergarten Directress.
Miss Ellen Cody	Kindergarten Assistant.
Jas. H. Wilkinson	Instructor: Manual Training.
Miss A. Auta Powell	Instructor: Art.
Miss Nina A. Ewing	Instructor: Household Economics.
Miss Gladys M. Breed	Instructor: Household Economics.
A. T. Cringan, Mus. Bac.	Instructor: Music.
Miss Miriam Thompson	Pianist.
Mrs. Jean Somers	Instructor: Calisthenics.
Capt. E. H. Price, S. of M.	Instructor: Drill.
Mrs. G. de Lestard	Instructor: French.

Number of pupils in 1920	458
Number of Kindergarten pupils in 1920	40
Total	498

VIII. Summary of Attendance at the Normal Schools

Normal Schools	I Class		II Class		Totals		Grand Totals
	Male	Female	Male	Female	Male	Female	
Hamilton	2	26	11	145	13	171	184
London	2	26	9	178	11	204	215
North Bay	.....	.....	7	109	7	109	116
Ottawa	1	11	10	163	11	174	185
Peterborough	.....	.....	13	137	13	137	150
Stratford	.....	.....	13	189	13	189	202
Toronto	14	43	11	167	25	210	235
Totals	19	106	74	1,088	93	1,194	
Grand Totals	I Class, 125		II Class, 1,162				1,287

In addition to the above there were 41 Kindergarten-Primary students at Toronto Normal School.

APPENDIX W

AUTUMN MODEL SCHOOLS, 1920

School	Principal	Attendance			Extra Mural	Limited Third Class Certificates	District Certificates
		Total	Male	Female			
Clinton	C. D. Bouck	2	0	2	2	4	0
Cornwall	G. R. Theobald	19	0	19	0	18	0
Kingston	W. F. Inman	15	1	14	2	17	0
Madoc	R. A. A. McConnell	4	1	3	0	3	0
Orillia	C. L. T. McKenzie	8	2	6	5	13	0
Renfrew	W. T. Baker	14	0	14	1	14	1
Totals	.....	62	4	58	10	69	1

APPENDIX X

LIST OF ASSOCIATE EXAMINERS AND CONTINUATION AND HIGH SCHOOL PRINCIPALS AND ASSISTANTS

I. Associate Examiners, 1920.

Model Entrance, Lower School, Senior High School Entrance and Senior Public School Graduation Diploma

Agriculture: J. A. Anderson, A. M. Woodley.

Algebra and Geometry: F. B. Clarke, D. R. Fletcher.

Arithmetic: F. C. Asbury, Alice I. N. Ball, Edna M. Boyle, C. S. Browne, L. H. Clarke, M. L. Cornell, J. T. Curtis, J. Elliott, A. J. Foerster, R. B. Goring, J. T. Jenkins, W. J. Lamb, K. A. MacKenzie, Lizzie Pirie, Elizabeth A. Tomkins, O. R. White.

Art: Charles S. Buck, Vivian E. Clayton, Irene P. Davis, A. Edith Giles, Hanna M. Goulding, Leila G. Johnston, Lillian MacIntyre, Nellie L. Mahon, Tena Martyn, Maude Millar, Elvira E. Nicholson, Ida E. Norton, S. W. Perry, Elsie M. Rice, Mabel Roberts, Mae H. Ryan, Lenore A. Sanderson, Eva M. Somerville.

Book-keeping and Writing: Ruth B. Heather, J. A. Ramsay, Alice B. Stone, D. M. Walker.

Composition: Laura M. Stillwell.

Geography: Mary Bell, G. A. Campbell, J. L. Challenor, Emelyn E. Delmage, A. C. Douglas, A. H. Dunnett, G. E. Ellis, H. G. Feasby, Mary A. Fraser, H. W. Graham, S. H. Henry, A. Hisey, S. A. Hitsman, J. Cecilia Horan, J. R. Howie, A. R. Innes, Alice C. Kelso, G. P. Keys, L. H. Kirby, Gladys R. Kirk, Marie Laird, Roberta M. Sillers, L. J. Stapleton, L. Stevenson, James H. Stewart, J. F. West, M. J. Wilker, E. H. G. Worden.

English Grammar: Margaret Abel, J. M. Adams, Mabel Allen, Prudence M. Austin, L. H. Corbett, Eva M. Cumming, W. F. Darroch, J. J. Edwards, Mabel C. Edwards, Kathleen B. Ferris, R. S. Foley, Mae M. Gardiner, Ruth W. Haines, Agnes I. Hamilton, John Hammond, Mary A. Hill, Clara Hulse, Pearl MacPherson, Lillian G. Mitchell, Winifred Morris, A. E. O'Neill, Wilhelmina D. Rutherford, Mary G. Scanlon, Annie A. Smith, Annie J. Stewart, Rose I. Strang.

History: Edith L. Atkin, Florence Corkery, Margaret M. Dawson, Magdalene DeLa-Mater, I. Mae Finch, Mary M. Gordon, S. P. Griffin, D. M. Halpenny, L. S. Hart, Philippa A. V. Hickey, Evelyn Hicks, Sada MacIntyre, M. Irene McCormack, J. G. McEachern, Hazel McGibbon, Rose McQueen, Mrs. Allie Marwick, Stella K. Mott, Louise E. Ney, Camilla H. Park, E. Josephine Redmond, Lucy Saunders, Winona Stewart, A. L. Stilwell, Helen F. Symons, Olive Tierney, Ina M. Turvey.

Literature: Mildred Belton, Josephine Chambers.

Elementary Science: E. T. Bell, J. M. Bell, G. W. Bunton, R. H. Carbert, C. S. Carter, J. Collins, Charles H. Danard, C. G. Fraser, Grace A. Gillespie, E. Meryl Hicks, J. S. Jackson, Guy E. Johnson, W. L. Kidd, M. Augusta MacLeod, L. R. McCrimmon,

Vivian C. McDonald, R. W. E. McFadden, T. W. Martin, Mabel I. Maxwell, Isabel C. Mitchell, Katie B. O'Connor, Mabel I. Pacey, H. C. Pugh, Bertha R. Stewart, C. Summers, H. E. Thompson, Edith A. Traver, L. J. White.

Household Science: Marion K. Boyd, Clara E. Elliott, Frances P. Prichard.

Spelling: J. H. Adams, Laura J. Berney, Gladys I. Brewster, Laura B. de Guerre, W. S. Ferguson, Annie H. Giles, F. M. Hicks, Margaret Holmes, Geraldine N. Irving, Mary McEachran, E. F. Milburn, Josie E. Switzer, W. S. Way.

Writing: Lillie C. Anderson, J. J. Bailey, Sarah J. Baker, Marion C. Dickson, Hazel I. Elcoat, Myrtle E. Fritz, A. F. Hare, S. B. Hatch, Annie L. Hudson, Jennie Mills, Edith Parlee, Mamie G. Quinn, Alice M. Tanner, C. M. Trace.

Middle School and Pass Matriculation

Algebra: C. S. Allin, N. E. Challen, D. H. Coates, J. D. Dickson, C. F. Ewers, T. M. Henry, W. H. Houser, Margaret A. Ionson, H. G. S. Jeffrey, C. F. Lawrence, J. McKellar, J. McQueen, W. G. Spencer, A. E. Thompson.

Art: A. R. Barton, H. W. Brown, T. W. Kidd, S. W. Perry.

Chemistry: F. J. Barlow, E. M. Bigg, G. E. Copeland, R. D. P. Davidson, T. W. Elliott, H. H. Graham, E. J. Halbert, J. A. Hamilton, H. J. Heath, E. H. Jolliffe, G. E. Kennedy, F. McNabb, J. L. Medcof, L. P. Menzies, B. P. Overholt, G. A. Robertson, William R. Saunders, Walter E. Shales, D. T. Walkom, D. A. Welsh, H. S. White, A. Williams, D. T. Wright, R. H. Young.

Composition: W. N. Bell, Lillian M. Campbell, Winnifred E. Dengate, M. Ada Dickey, T. E. Elliott, Luella Grainger, W. E. Hanna, E. A. Hardy, Margaret J. Helson, G. L. MacDonald, A. E. MacLean, Margaret C. McGregor, J. H. Mowat, Mildred E. Stinson.

French Authors: Annie B. Brain, Evelyn E. Conlin, Muriel Duncan, Dorothy J. Grant, Mrs. L. M. Jamieson, D. MacKay, Hester E. A. McCaw, H. S. McKellar, Donella M. McRae, Mayme I. Montgomery, Margery E. Ross, Mary H. Wallace, Marion F. Wilkie.

French Composition: G. S. Bale, L. J. Clark, J. O. Clothier, J. Louise Galloway, Alexandria A. Howson, Mary W. Hubbs, Harriet Ingham, Rachael L. L. Jones, C. A. Latour, Marie MacMinn, W. J. McAndrew, H. M. Magee, Kathleen T. O'Shaughnessy, W. H. C. Williams, Mary St. G. Yarwood.

Geometry: Florence J. Adams, Frances M. Ashall, G. S. Campbell, Wilhelmina M. Humphries, G. W. Keith, Jennie A. Kinnear, H. C. Kinnee, J. H. Knowles, R. N. Merritt, M. J. O'Neill, G. E. Pentland, James H. Philp, E. G. Powell, C. W. Robb, Susan A. VanAlstyne, S. Wightman.

German: Helen S. Mackintosh, Francis Owen, R. Reid, J. D. Robins.

Ancient History: W. D. T. Atkinson, Agnes W. F. Balfour, W. J. C. Barrett, D. Breslove, Brother Francis, C. J. Burns, Carrie L. Costin, Euphemia J. Cowan, Margaret T. Cowan, John Davidson, Martha A. Fitch, F. Grace T. Hall, Mary A. Harris, Maybelle G. Kerr, R. H. King, Alma M. Matthews, A. W. Morris, S. Winnifred Nichol, Janet L. Penfold, G. H. Reed, Ralph Ross, Myrtle H. Stevens, W. J. S. Southcombe, Lillie A. Traver, J. W. Treleaven.

British and Canadian History: Anna F. Almas, G. N. Bramfitt, Mrs. Ethel M. Cameron, J. O. Carlisle, Jessie S. Cattanach, A. B. Cooper, May Cryderman, Viola J. Dobson, W. K. Foucar, William A. Glass, Mabel M. Graeb, Ethel R. Guthrie, Mrs. L. E. Horne, Edith P. Husband, Katherine M. Jackson, A. Johnson, J. Keillor, E. Blanche MacLeod, W. G. McNeil, Archibald McVicar, Selkirk A. Morrison, Amy A. Newton, A. I. Ogilvie, Gertrude Ryan, J. F. VanEvery, W. S. Wallace.

Latin Authors: R. T. Andrews, L. Brown, Rosalie A. Dugit, P. K. Hambly, Hazel F. Hay, R. S. Jenkins, Katie B. Johnston, Lillie E. V. Lloyd, G. B. MacQuarrie, J. M. McKinley, G. E. Mabee, E. A Miller, Charles F. Mills, Frances D. Morden, C. A. Shaver, Laura A. Smithson, Elsie S. Tighe, B. A. Upshall.

Latin Composition: A. A. Affleck, F. H. Butcher, Nora G. Dewar, A. W. Dunkley, Jessie E. Eckhardt, W. A. Graham, J. H. Hardy, W. D. Lowe, W. R. McCamus, C. McKinnon, Jessie E. Matthews, C. A. Mayberry, W. E. Murdoch, F. P. Riddell.

Literature: Mabel M. J. Baird, Mary Jean Bull, J. D. Christie, John A. Cooke, Margaret T. Cowan, Grace Edwards, M. Erb, Florence M. Ewing, Bessie S. Farmer, Christine M. Fraser, D. A. Gilchrist, Beatrice C. Gilhooly, May B. Hiscock, E. W. Jennings, Isabella J. MacDougall, Annie K. McGregor, C. Lillie Maclennan, Jessie H. Maitland, J. P. S. Nethercott, James E. Skeele, Ruth Stewart, Agnes M. Stuart, Annie M. A. Taylor, Lillie A. Traver, Muriel J. W. Wallace.

Physics: A. H. S. Adams, J. S. Bell, J. E. Burchell, J. G. Cameron, M. Cameron, G. A. Cline, Hugh Davidson, W. H. H. Green, E. H. Greig, J. R. Hamilton, Catherine I. Hyde, R. D. Keefe, C. A. K. Lehman, A. C. Lewis, H. Loucks, J. E. Marcellus, A. Pearson, Nellie M. Philp, A. H. D. Ross, D. E. Smith, T. C. Smith, E. J. Wethey, Edna J. Williams, C. G. Yorke.

Upper School and Honour Matriculation

Classics: Beatrice L. Fletcher, D. A. Glassey, W. B. L. Howell, J. T. Lillie, F. H. Lingwood, J. Morgan, J. F. Thompson, Mrs. E. K. Urquhart.

Composition: T. Carscadden, M. Ada Dickey, Katie L. Stewart, E. H. A. Watson.

French and German: A. W. Baird, Pearl B. Faint, Jessie Houston, H. W. Irwin, Mary V. McWhorter, Aileen Noonan.

History: J. A. Carlyle, Elizabeth Henstridge, Mary McCallum, Mary H. O'Donoghue, R. Stothers.

Literature: Margaret Clifford, Katherine Jackson, W. N. Sexsmith, Ada L. Ward.

Mathematics: O. Asselstine, T. Kennedy, T. A. Kirkconnell, J. M. Lawr, Stephen Martin, G. W. Rudlen, T. E. Speirs, J. S. Wren.

Science: C. C. Arthur, Annie A. Boyd, P. W. Brown, J. F. Calvert, S. J. Courtice, J. C. Doherty, W. M. Erwin, Thomas Firth, A. C. Hazen, F. J. Johnston, W. J. McMillan, A. M. Patterson, J. H. Sexton, W. E. Shales, P. M. Thompson.

II. List of Principals and Assistants of Continuation Schools, January, 1921

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. & Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Aberfoyle	Hood, Grace Isabel ...(Int.)				1920	½	....	1,000	.....	.....
Acton	Roszel, John M.			Phys. Cul.	1919	6½	15	1,900	.....	.....
	Knapp, Elizabeth E.			Phys. Cul., Art	1920	2½	4	.....	.....	1,200
†Agincourt, 14 Scarboro'	Short, John H.				1920	½	4	1,200	.....	.....
Ailsa Craig	Bell, John A.			Phys. Cul., Agr.	1920	8	....	1,800	.....	.....
Alvinston	McDowell, Jennie			Phys. Cul., Art	1919	5½	10	1,500	.....	.....
	Dolbear, Calla C.		Art ...(Int.)	Phys. Cul.	1919	2½	2	.....	.....	1,100
Arkona	Stevens, Violet E.			Art	1920	½	6	1,450	.....	.....
Ayr	McDonald, Margaret D.....*			Phys. Cul.	1920	5½	1	1,600	.....	.....
	Nelson, Dorothy A.			Phys. Cul.	1920	½	2	.....	.....	1,200
Bancroft	Keenan, Edward J. .....‡	B.A., Queen's		Phys. Cul.	1914	14	2½	1,800	.....	.....
	Prosser, Thornton ....(Int.)				1920	½	....	.....	1,500	.....
Bath	Garvey, Leo J.			Art	1920	2½	2	1,400	.....	.....
	Warren, Cecille V.		Art ...(Int.)		1920	2	2	.....	.....	900
Beaverton	Morgan, Flora E.			Phys. Cul.	1921	8½	3	1,800	.....	.....
	McRae, Alice A.	B.A., Tor.		Art	1917	3½	....	.....	.....	1,000

Beeton	Powell, James A.	B.A., Queen's		Art, Phys. Cul.	1920	2½	....	1,800	.....	.....
	Muckle, Leata W. ....(Int.)			Phys. Cul.	1920	1	....	.....	.....	1,400
Belmont, U 11., S. Dorchester	MacKillop, Oliver M.			Phys. Cul.	1913	7½	4	1,900	.....	.....
	Moore, Kathleen V.	B.A., Queen's	M. & H., Art (Int.)		1918	3	....	.....	.....	1,000
Blenheim	Gould, Ford M.	B.A., Queen's		Art, Phys. Cul.	1920	1	4½	2,000	.....	.....
	Currie, Mrs. Ethelwyn			Art	1920	3½	....	.....	.....	1,400
Blind River	Craven, Henry ....(Int.)**			Phys. Cul.	1920	1½	....	1,500	.....	.....
	Woodcock, Mary S.			Phys. Cul.	1919	1½	5	.....	.....	1,100
†Blyth	Bell, Mary *			Phys. Cul.	1919	5½	1	1,500	.....	.....
Bolton	Fowler, Alfred C. ....(Int.)				1920	½	2½	1,400	.....	.....
Bothwell	Hicks, Viva M.			Art	1921	12	1	1,500	.....	.....
	Gibb, Moyna B. ....(Int.)			Phys. Cul.	1920	½	½	.....	.....	1,150
Bowesville, 5 Gloucester	Clement, Isabel *			Phys. Cul., Art	1918	4	1	1,200	.....	.....
Bridgeburg	Thompson, Howard E.		Phys. Cul. (Int.)		1917	6½	2	2,500	.....	.....
	Chambers, Josephine	B.A., Tor.	Art....(Int.)	Phys. Cul.	1914	7	½	.....	.....	1,600
	McGhie, Mercie E. ....(Int.)	B.A., Queen's		Phys. Cul.	1920	½	....	.....	.....	1,200
Bruce Mines	Wood, Samuel D. **				1920	½	....	1,600	.....	.....
	Williams, William A...(Int.)				1920	½	....	.....	1,200	.....
Brussels	Scott, Benjamin S.			Phys. Cul.	1914	10	3	1,800	.....	.....
	Morris, Winifred		Art .....(Int.)	Phys. Cul.	1918	6½	4½	.....	.....	1,400
Burk's Falls	Millard, Lena			Art, Phys. Cul.	1919	6½	3	1,600	.....	.....
	Armstrong, Mabel R.			Phys. Cul.	1920	2½	2	.....	.....	1,200
Cannington	Bigg, Edmund M. ‡	M.A., Tor.	Sci.	Phys. Cul.	1917	47	....	1,500	.....	.....
	Little, Evelyn M.		Art .....(Int.)		1919	2	6	.....	.....	1,100
Cardinal	Clarke, Olive M.	B.A., Queen's		Art	1920	2½	....	1,600	.....	.....
	Strong, Harriet E. ....(Int.)				1919	1½	....	.....	.....	1,100
Carp, 3 Huntley	McTurk, Isabel	B.A., Queen's			1919	4½	....	1,500	.....	.....
	Gillan, Kathleen M.		Art .....(Int.)		1917	3½	2	.....	.....	1,200

*Endorsed for Principalship. **Temporary certificate as Principal. †One teacher devotes full time and one half time to Continuation School work.
‡High School Principal's certificate.

List of Principals and Assistants of Continuation Schools, January, 1921—Continued

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. & Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Chapleau, 1 Chapleau	Joynt, James H.	.....	.....	Phys. Cul., F.M..	1920	7	4½	2,000	.....	.....
	Holley, Anna M. .....(Int.)	.....	.....	Art	1921	3½	2	.....	.....	1,500
Claremont, 15 Pickering..	Wilker, Milton J.	.....	Phys. Cul. (Int.)	.....	1914	6½	2	1,600	.....	.....
	(Teacher to be appointed)..	.....	.....	.....	....	....	....	.....	.....	.....
Clifford	Edge, Alix M.	.....	.....	Art, Ph. Cul., Agr..	1918	2½	1	1,200	.....	.....
	Tranter, Hazel M.	.....	.....	Phys. Cul., Agr....	1920	½	4	.....	.....	1,100
Cochrane	(Teacher to be appointed)..	.....	.....	.....	....	....	....	.....	.....	.....
Coldwater	Brunkard, Ethel	.....	.....	Art, Phys. Cul. .	1921	7	4½	1,800	.....	.....
	McMackon, Laura F. ..(Int.)	.....	.....	.....	1921	....	2½	.....	.....	1,300
Comber, 4 Tilbury W. ...	Hicks, E. Meryl .....*	.....	.....	Phys. Cul., Art..	1919	5	½	1,500	.....	.....
	Adams, Edith I.	.....	.....	Phys. Cul.	1919	3½	1	.....	.....	1,200
Cookstown, 5 Essa	Stewart, Bertha R.	.....	.....	Ph. Cul., Ho. Sci..	1920	5½	7	1,500	.....	.....
	McKechnie, Catriona S.	.....	Phys. Cul. (Int.).	.....	1919	2½	3	.....	.....	1,200
Creemore	MacNaughton, Evelyn I.	.....	Art .....(Int.)	Phys. Cul.	1919	3½	2	1,600	.....	.....
	McIntosh, Jean	.....	.....	Phys. Cul.	1919	3½	....	.....	.....	1,275
Delaware, 2 Delaware ...	Conway, Irene E.	.....	.....	Art, Phys. Cul. .	1916	11	3	1,300	.....	.....
	Fox, James H. .....(Int.)	.....	.....	.....	1919	1½	....	.....	1,200	.....
Delhi	McConnell, Mrs. Jessie C....	.....	.....	Art, Phys. Cul. ..	1919	8	2	1,400	.....	.....

Drayton	Clark, George A.			Agr., F. M.	1913	15½	6	2,000		
	Grant, Cora			Phys. Cul., Art	1919	2½	3			1,300
	Mahon, Nellie L.		Art, Phys. Cul.		1920	8	4			1,400
Dresden	Marwick, Bruce D.			Phys. Cul.	1920	4	2	1,600		
	Marwick, Mrs. Allie		Phys. Cul.	Art	1920	6	6			1,200
†Drumbo, 11 Blenheim	Lawrence, Edna H.				1920	½	2	1,350		
Dryden	Allen, Eula P.			Phys. Cul.	1920	4½	2	1,500		
	Crone, Eleanor L. (Int.)				1920	½				1,200
Eganville	Stapleton, Louis J.			Phys. Cul.	1919	3½	2	1,540		
	Giles, Annie H.			Art	1918	7½	3½			1,000
Eganville (R. C. S. Sch.)	Maher, Margaret (Sr. Mary Aurelia)		Art	Phys. Cul.	1914	6½	12½	800		
	Griffin, Elizabeth H. (Sr. St. Dorothy)				1918	2½	9			700
Elmira	Clarke, Frank B.			Phys. Cul.	1920	17½	6	2,000		
	Start, Isabel S. (Int.)				1920	1½				1,500
Elmvale, 5 Flos	Miller, Erle G.			Phys. Cul.	1918	3½	4	1,600		
	Laughlin, Ruby J.			Art, Phys. Cul.	1918	3½				1,300
Ennismore, 4 Ennismore	McQuade, Gertrude V. (Int.)**	B.A., Tor.	Mods. & Hist.	Phys. Cul.	1919	2½		1,200		
	Crough, Beatrice E. (Int.)			Art	1919	3½	1½			900
†Erin	Guilfoyle, Annie *			Art	1917	10½	1	1,500		
Espanola	Norton, Ida E.		Art (Int.)	Phys. Cul.	1920	13	5	1,500		
Fenelon Falls	Fennell, Rena L.			Art, Phys. Cul.	1920	2½	2	1,500		
	Lewis, Gordon (Int.)				1920	½	½		1,200	
Feversham, 7 Osprey	Morris, Olive M. (Int.)				1920	½	1	1,100		
Finch	Armstrong, Eunice			Art	1911	11½	2½	1,550		
	McTavish, Alice Miriam (Int.)	B.A., Queen's		Phys. Cul.	1920	½	5½			1,400

*Endorsed for Principalship. **Temporary certificate as Principal.
†One teacher devotes full time and one, half time to Continuation School work.

List of Principals and Assistants of Continuation Schools, January, 1921—Continued

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. & Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Fingal, 12 Southwold	Gliddon, Mildred E.	.....	.....	Phys. Cul.	1918	3 1/2	3	1,400	.....	.....
	Bernath, Elva .....(Temp.)	.....	.....	Art	1920	3/4	2	.....	.....	1,300
Frankford, 11 Sidney	Bell, John M.	.....	.....	Phys. Cul.	1915	5 1/2	31	1,600	.....	.....
	Miller, Mary Olive ...(Int.)	.....	.....	.....	1920	1	1/4	.....	.....	1,200
Gore Bay	Hindle, George	B.A., Queen's, D.Pæd., Tor..	Eng. & Hist.(Int.)	.....	1920	1	9	1,500	.....	.....
	Crich, Wilfrid V. ....(Int.)	.....	.....	Phys. Cul.	1920	3/4	....	.....	1,200	.....
Grand Valley	Glenn, Everett H.	.....	.....	.....	1919	5	2	2,000	.....	.....
	Grindell, Hazel	.....	Art .....(Int.)	.....	1919	2 1/2	1	.....	.....	1,200
Hanover	Magee, James A.	.....	.....	Phys. Cul.	1905	17 1/2	2	2,000	.....	.....
	Strachan, David L.	.....	.....	Phys. Cul.	1920	2	4	.....	1,300	.....
Harrow, 9 S. Colchester..	Gillham, Blanche	.....	Art (Int.).....	Phys. Cul.....	1919	3 1/2	1	1,400	.....	.....
	Wesley, Caroline .....(Int.)	.....	.....	.....	1920	3/4	1	.....	.....	1,200
Havelock	Davidson, John .....‡	M.A.,LL.B.,Tor	Classics	.....	1917	39 1/2	3	2,000	.....	.....
	Brewster, Gladys F.	.....	.....	Phys. Cul., Art..	1914	6 1/2	....	.....	.....	1,200
Hepworth	Goldblatt, Ray .....(Int)	.....	.....	.....	1919	1 1/2	....	1,100	.....	.....
Highgate	Burke, Alex.	.....	.....	.....	1913	26 1/2	13	1,800	.....	.....
	Murray, Edith Mary	.....	Art .....(Int.)	Phys. Cul.	1920	2 1/2	2 1/2	.....	.....	1,300

Huntsville	Bernath, Alfred C.				1900	19½	5½	2,500		
	Peregrine, H. May			Art	1912	13	2			1,350
	Ross, Pearl (Int.)			Phys. Cul.	1920	1	3			1,000
Jarvis	Cunningham, Elinor I.			Phys. Cul., Art	1920	½	5	1,400		
Jockvale, 10 Nepean	O'Donohue, John A.	B.A., Queen's		Art	1917	13½	3	1,250		
Kars, U. 3 North Gower	MacNabb, Christina A.	B.A., Queen's		Phys. Cul.	1919	1½	3	1,400		
	Miller, Sadie G. (Int.)				1920	½	½			1,000
Keewatin	Adams, John M.			Phys. Cul.	1918	9	8	2,100		
	MacPherson, Rose			Art, Phys. Cul.	1918	2½	2			1,400
Kenmore, 15 Osgoode	Aylsworth, Bessie C.			Phys. Cul.	1920	2½	3	1,400		
	Fraser, Christine M.	B.A., McM.		Phys. Cul.	1921	6	5			1,700
†Kinburn, 11 Fitzroy	Ranson, Bertha M.		Phys., Cul.		1921	5	2	1,700		
Lakefield	Simpson, John M. ‡	B.A., Queen's	Phys. Cul.		1916	11½	9	1,600		
	Corkery, Mary E.			Phys. Cul.	1921		5½			1,300
	Stark, Laverna B.			Art, Phys. Cul.	1921	4	6			1,400
Lanark	Payette, Henry J. (Int.)*	B.A., Tor.		Art	1919	2		1,300		
	McLean, Helen G. (Int.)	B.A., Queen's		Phys. Cul.	1919	1½	½			1,100
†Lansdowne, 9 Leeds and Lansdowne Front	Garbutt, Ruby R.			Art, Phys. Cul.	1919	3½	1	1,300		
Lion's Head	Simmie, Jean			Art, Phys. Cul.	1920	1	2½	1,000		
Little Current	Knowles, Anna V.		Art (Int.)	Phys. Cul.	1920	2½	6	1,500		
Lobo	Caverhill, Elsie M.	B.A., Queen's	Eng.&Hist. (Int.)	Phys. Cul.	1920	5	2	1,300		
	Anderson, Effie E.			Art	1920	½	4			1,200
Lucknow	Ranson, Eva M.			Art	1921	10	3	1,900		
	McLean, Frances E.				1920	11½	6			1,300
†Malakoff, 3 Marlborough	Taylor, Neil A. (Int.)**				1919	1½		1,300		
Manitowaning, 2 Assiginack	Hart, Luther S.		Art	Phys. Cul.	1919	3½	4	1,500		

*Endorsed for Principalship. **Temporary certificate as Principal. ‡High School Principal's certificate

†One teacher devotes full time and one half time to Continuation School work.

List of Principals and Assistants of Continuation Schools, January, 1921—Continued

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. & Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
†Manotick, 18 Osgoode ..	Fair, C. Elizabeth ..(Int.)**	.....	.....	.....	1921	....	1½	1,400	.....	.....
Marmora	Daley, Muriel M. .....*	.....	Phys. Cul.	.....	1920	7½	1½	1,600	.....	.....
	Stewart, Ruth	B.A., Queen's..	M. & H.,(Int.)P.C.	.....	1920	4½	1	.....	.....	1,600
Maxville	Keough, Margaret	.....	Art (Int.), H. Sci.	.....	1919	4½	5½	1,500	.....	.....
	Clendinnen, Marg't E..(Int.)	B.A., Queen's..	.....	.....	1920	½	....	.....	.....	1,200
Melbourne, U. 16 Caradoc.	Robinson, Wm. G....(II Cl.)	.....	.....	.....	1900	20½	5	1,500	.....	.....
	Snell, Blanche E. .....(Int.)	.....	.....	.....	1920	½	1	.....	.....	1,100
Merlin, U. 5 Raleigh	Barnby, Vera Erena	.....	Phys. Cul..(Int.)	.....	1920	4½	2	1,500	.....	.....
	(Teacher to be appointed) ..	.....	.....	.....	....	....	....	.....	.....	.....
Merrickville	Mazinke, Henrietta E. .....*	.....	.....	Art	1919	7	½	1,400	.....	.....
	Gillan, Ella E. .....(Int.)	B.A., Queen's..	Math. .....(Int.)	Phys. Cul.	1920	½	....	.....	.....	1,250
Metcalfe, 11 Osgoode	Bryan, Cameron A.	.....	.....	Art, Phys. Cul...	1919	2	2	1,700	.....	.....
	Grooms, Bernice .....(Int.)	.....	.....	.....	1921	....	½	.....	.....	1,200
Millbrook	Money, Mabel	.....	Art .....(Int.)	.....	1920	4½	5	1,800	.....	.....
	Lee, Elizabeth D.	.....	.....	Phys. Cul.	1920	½	3½	.....	.....	1,200
Milverton	Carbert, Robert H.	.....	.....	Phys. Cul.	1919	12½	3	2,000	.....	.....
	Eagleson, R. La Vergne(Int.)	.....	.....	.....	1920	1½	1½	.....	1,500	.....
Mimico	English, John W.	B.A., Queen's..	.....	.....	1920	½	23	3,000	.....	.....
	Wells, Dorothy	.....	Art.....(Int.)	Phys. Cul.	1921	2	1	.....	.....	1,400
	Kennedy, Florence I...(Int.)	.....	.....	.....	1921	....	1½	.....	.....	1,400

Minden, U. 1 Anson	Barnes, Herbert G. (Int.)				1920	½		1,200	
Morriston, 8 Puslinch	Brydon, Eleanor H. (Int.)				1920	½		1,000	
Mount Albert, 13 East Gwillimbury	McKenna, Jessie	B.A., Queen's	Eng.&Hist. (Int.)	Phys. Cul.	1920	2½	2½	1,400	
	Waterman, Isobel M.			Art	1920	2½	1		1,100
Mount Brydges	Davidson, Georgia	B.A., West		Art, Phys. Cul.	1918	6	4	1,600	
	O'Brien, Wilfrid E. (Int.)			Phys. Cul.	1919	2	½		1,500
†Navan, 3 Cumberland	O'Brien, Catherine E.				1920	½	2	1,350	
New Hamburg	Bowden, Wm. L. ‡	B.A., Queen's		Ph. Cul., Agr.	1919	6½	12	1,850	
	Foster, Mary M.			Art	1920	1½	6		1,200
New Liskeard	Dobbie, Isabella E.			Agr., Farm Mech.	1911	12	18	2,000	
	Brown, Mona (Int.)			Art, Phys. Cul.	1919	2½	1		1,500
North Augusta, 17 Augusta	Whelan, Anna M.				1920	2½	3	1,500	
	Connell, Constance L. (Int.)				1920	1½			1,200
North Gower, 6 North Gower	White, Edna M. *		Art (Int.)		1919	3½		1,300	
	Abbott, Florence M.			Phys. Cul.	1919	1½	2		1,000
Norwich	Young, Gordon			Phys. Cul.	1917	3½	8	1,800	
	Templar, Nora G.			Art	1919	1½	2		1,300
	Barclay, Jean A. (Int.)				1921	½	1		1,300
Odessa, 13 Ernestown	Howitt, Mary (Int.) *			Phys. Cul.	1920	1½	1	1,400	
	Fraser, Laura G. (Int.)	B.A., Queen's		Art	1920	½			1,000
Oil Springs	Geddes, Mary M.			Art, Phys. Cul.	1918	2½	2	1,400	
	Collins, Bertha V.			Phys. Cul.	1920	½	2		1,100
Orono, 12 Clarke	Costin, Carrie L.	B.A., Queen's		Phys. Cul.	1918	4½	3	1,500	
	King, Annie		Art (Int.)	Phys. Cul.	1921	2	2		1,200
Paisley	Vasey, John B.		Phys. Cul. (Int.)		1920	1½	2	1,500	
	Watson, Mary E. (Int.)				1920	½	1½		1,000

*Endorsed for Principalship.
‡High School Principal's certificate.
†One teacher devotes full time and one, half time to Continuation School work.
**Temporary certificate as Principal.

List of Principals and Assistants of Continuation Schools, January, 1921—Continued

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. & Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation School	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Pakenham, 4 Pakenham	White, Mabel R.	.....	.....	Phys. Cul., Art	1918	9	....	1,500	.....	.....
	Quinlan, Lucie H.	.....	.....	.....	1921	....	2	.....	.....	1,200
Palmerston	Anglin, Sara	.....	.....	.....	1913	12½	10	1,700	.....	.....
	Houze, Margaret .....(Int.)	.....	Art	.....	1919	2½	1	.....	.....	1,000
Plattsville, 24 Blenheim	Collins, James .....‡	B.A., Tor.....	Art	.....	1919	6½	3½	1,500	.....	.....
	McCorquodale, Elizabeth	.....	.....	Phys. Cul.	1920	½	5	.....	.....	1,200
Port Burwell, 2 Bayham	Austin, Prudence M.	.....	Art	Phys. Cul.	1920	6½	3	1,500	.....	.....
	Twiss, Countess L.	B.A., McM	Classics (Int.) Art	Phys. Cul.	1920	3½	1	.....	.....	1,000
Port Colborne	Dobson, Geo. C.	B.A., Tor.....	Phys. Cul.. (Int.)	.....	1921	2½	5	2,400	.....	.....
	Stephens, Ella G.	.....	.....	.....	1921	3½	3	.....	1,800	.....
	Cowan, Anna K.	.....	Art	Phys. Cul.	1918	3½	1	.....	.....	1,200
Port Credit	Doupe, Henry A.	.....	.....	Art	1919	12½	2½	1,900	.....	.....
	Leggott, Louie V.	.....	Phys. Cul.. (Int.)	.....	1920	½	3	.....	.....	1,100
Powassan	Johnston, Mabel C.	B.A., Queen's..	Art .....(Int.)	.....	1918	4	2½	1,400	.....	.....
†Princeton, U. 21, Blenheim	...uir, Shirley L.	.....	.....	Phys. Cul.	1920	½	2	1,500	.....	.....
Richard's Landing	White, Mary E. .....(Int.)	.....	.....	.....	1919	1½	....	1,200	.....	.....
Richmond	McGee, Florence	.....	.....	Art	1920	1½	2	1,380	.....	.....
	Reid, Emmett C. .....(Int.)	.....	.....	Art	1920	1½	4	.....	1,320	.....

Ridgeway, 11 Bertie	Woodley, Arthur M.			Agr.	1913	13½	7	2,000		
	Houser, Evelyn G.		Art	Phys. Cul.	1917	3½	3			1,100
Ripley, 10 Huron	Strathdee, Mary			Art	1914	6½	18	1,500		
	Martyn, Tena		Ph. Cul.(Int), Art		1920	4½	1			1,500
Rodney	Dore, Harry C.			Phys. Cul.	1920	1½	2½	1,500		
	Ryckman, Irene M.....(Int.)				1919	1				1,150
Russell, 2 Russell	MacIntyre, Lillian		Art	Phys. Cul.	1919	7	2	1,500		
	Maitland, Jessie H.	B.A., Queen's..	Eng.&Hist. (Int.)	Phys. Cul.	1917	4½				1,250
St. George	Gilchrist, John ‡	B.A., Queen's..		Agr.	1916	4½	4	2,100		
	Jenkins, Mrs. Mary ‡	M.A., Tor....	Fr. & Ger..(Int.)	Art	1920	10½				1,500
Schomberg, 14 King	Kaufman, Alvin J. ....(Int.)				1921		11	1,400		
Scotland U. 18 Burford and 3 Oakland	Turvey, Ina Merle *†		Art	Phys. Cul.	1919	6½		1,300		
	Foster, Helen E.			Agr., Farm Mech..	1920	½	4			1,100
Southampton	Schooley, Fred. T.			Phys. Cul.	1920	15½	6½	1,700		
	Worsell, Reta M. .....(Int.)				1920	½				1,200
South Mountain, 1 Mountain	Smith, James T., *†			Phys. Cul.	1919	4		1,400		
	Elliot, Marion Belle ..(Int.)			Art	1919	1½				1,200
South Porcupine, U. 1 A Tisdale	Knox, Mary E. .....(Int.)			Phys. Cul.	1920	1		1,400		
Spencerville, 15 Edwardsburg	Wallace, Minnie G.	B.A., Queen's.		Phys. Cul.	1921	2½		1,500		
	Stephenson, Lois E. ..(Int.)				1921		1½			1,100
Springfield	McKillop, Jessie A.		Art, (Int.), Ph. Cl.		1917	3½	3	1,600		
	Hassard, Mary G.				1920	½	2			1,200
Stayner	Murday, Arthur M.				1920	9½	8	2,000		
	Swallow, Margaret B.			Art, Phys. Cul....	1917	3½				1,100
Stella	Buchanan, Luella M. *†			Phys. Cul.	1918	2½	2	1,500		
	Alderson, Bessie G.			Art, Phys. Cul....	1919	1½	2			1,350
Stouffville	Stouffer, Archibald		Phys. Cul. (Int.).		1918	2½	2	1,900		
	Flumerfelt, Annie B. ..(Int.)	B.A., Tor.			1920	½				1,400

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List of Principals and Assistants of Continuation Schools, January, 1921—Continued

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's Certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. & Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Sturgeon Falls	Russell, Robert V.....(Int.)*			Art, Phys. Cul.	1919	1½	....	1,600	.....	.....
	McEown, Ruth .....(Int.)	B.A., McM.....		Art, Phys. Cul...	1920	2	....	.....	.....	1,400
Sutton	Macdonald, Margaret J.....		Art.....(Int.)	.....	1918	2½	1	1,400	.....	.....
	Robinson, Bertha E.			Agr.	1920	1½	4	.....	.....	1,300
Tamworth	Fletcher, Douglas R.			Phys. Cul.	1915	6	3½	2,000	.....	.....
	Ross, Christina B. ..(Temp.)			.....	1920	½	....	.....	.....	1,200
Tara	Gilmour, Allan .....‡	B.A., Queen's..		Phys. Cul.	1921	14	4½	1,800	.....	.....
	McGibbon, Hazel M.			Art	1920	7	½	.....	.....	1,200
Tavistock	Bell, Jessie M.	B.A., Tor.....	Mods. & Hist. ...	Art, Phys. Cul. ..	1916	10½	1½	1,500	.....	.....
	Johnston, Jessie V. ...(Int.)			.....	1921	....	1	.....	.....	1,200
Teeswater	Thompson, Harry C.			.....	1912	8½	3	1,600	.....	.....
	Hicks, Evalyn G. .....*			Art, Phys. Cul....	1920	5½	....	.....	.....	1,275
Thamesville	Hicks, Frederick M.			Phys. Cul.	1920	15	2½	1,600	.....	.....
	Meldrum, Florence C...(Int.)			Art	1920	1½	2	.....	.....	1,100
Thessalon	Alkerton, Nancy E.			Art	1921	2½	2	1,600	.....	.....
	Pearson, Florence E...(Int.)	B.A., Tor.....		Phys. Cul.	1919	1½	2	.....	.....	1,300
Thornbury	Chisholm, Renwick J. .....*			Phys. Cul.....	1920	7½	....	2,000	.....	.....
	Brown, Harry W. ....(Int.)			.....	1920	½	....	.....	1,200	.....

Thorndale, 8 W. Nissouri.	Gendron, Muriel M.	B.A., Tor.		Phys. Cul.	1919	2½	....	1,300	.....	.....
	Copeland, Bertha M. (Int.)			Phys. Cul.	1920	½	1½	.....	.....	1,400
Tilbury	(Two teachers to be appointed)				....	....	....	.....	.....	.....
					....	....	....	.....	.....	.....
†Timmins	Carter, Chetwynd S.			Phys. Cul.	1919	10½	....	2,400	.....	.....
Tottenham	Campbell, Mabel				1920	5½	4	1,800	.....	.....
	Coumans, Melinda M. (Int.)				1920	1½	....	.....	.....	1,000
Warkworth, 2 Percy	Mitchell, May		Phys. Cul.	Art	1919	12	5½	1,400	.....	.....
	Twomey, Mary			Art	1920	1½	3	.....	.....	1,100
Westboro', 2 Nepean	Stewart, Annie J. ‡	B.A., Queen's.		Phys. Cul.	1919	10½	1½	1,750	.....	.....
	MacNeil, Lena L.			Art	1919	3	½	.....	.....	1,300
	Cross, Dora Edith (Int.)				1921	....	....	.....	.....	1,100
West Lorne	Meadows, Persie C.	B.A., Queen's.		Art	1918	9½	4	1,500	.....	.....
	Cook, Ida M.			Phys. Cul.	1919	1½	3	.....	.....	1,100
Westmeath, 2 Westmeath.	Fraser, Nancy H. (Int.)				1920	½	1	1,200	.....	.....
†Westport	Knapp, Gertrude			Art	1920	6½	3	1,450	.....	.....
‡Westport (R. C. S. Sch.)	McDonell, Margt. (Sr. St. Clare) (Int.)**	B.A., Queen's.			1919	1½	3	1,000	.....	.....
Winona, 1 Saltfleet	Harris, Emarilla B. (Int.)			Art, Phys. Cul.	1920	1½	2	1,300	.....	.....
Wroxeter	Burchill, Mrs. Jean S.			Phys. Cul.	1919	15½	10	1,300	.....	.....
	Sanderson, Elizabeth M.			Art, Phys. Cul.	1918	2½	2	.....	.....	1,000

*Endorsed for Principalship. **Temporary certificate as Principal.

†One teacher devotes full time and one, half time to Continuation School work.

SUMMARY, CONTINUATION SCHOOLS, JANUARY, 1921

Number of Schools, Sex and Number of Teachers, and Percentages

Schools

Three-teacher Schools	8
Two-teacher Schools	100
*One-teacher Schools	36
Number of Schools	144
Increase for the year	7

Teachers

Men	71
Women	184
Total	255

Percentages

January,	1921:	Men,	27.84;	Women,	72.15
"	1920:	"	25.81;	"	74.18
"	1919:	"	27.77;	"	72.22
"	1914:	"	31.65;	"	68.34
"	1912:	"	39.44;	"	60.55

Salaries

Highest Salary, Principals	$3,000
" " Male Assistants	1,800
" " Female Assistants	1,700
Average Salary, Principals	1,579
Increase for the year	276
Average Salary of Assistants	1 229
Increase for the year	300
Average Salary, all Teachers	1,424
Increase for the year	285
Average Salary, Male Assistants	1,356
Increase for the year	389
Average Salary, Female Assistants	1,215
Increase for the year	288

University Graduates, Specialists, etc.

Graduates	47
Non-graduates	208
Percentage of Graduates, Jan., 1921	18.43
" " " 1920	27.45
Percentage of Non-Graduates, Jan., 1921	81.56
" " " 1920	72.54
Specialists, Jan., 1921	22
Interim Specialists, Jan., 1921	35
Percentage of Specialists and Interim Specialists, Jan., 1921	22.35
Percentage of Specialists and Interim Specialists, Jan., 1920	23.36
Elementary Certificates in Art	70
" " Physical Culture	123
" " Household Science	1
" " Farm Mechanics	4
Intermediate Certificates in Agriculture and Horticulture	10
Teachers holding Elementary or Intermediate Certificates, Jan., 1921	166
Increase for the year	14

*Thirteen of these schools have in addition one teacher who devotes at least half time to Continuation School work.

III. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Barrie	Girdwood, Arthur R.	B.A., McM.	Math.	Phys. Cul.	1919	17	....	2,875	.....	.....
	Ramage, George E.	B.A., McM.	Phys. Cul. (Int.), Sci.		1921	4½	....	.....	2,500	....
	Dewar, Nora G.	B.A., Queen's	Classics	Art.	1920	5½	....	.....	.....	1,700
	McCallum, Mary A.	B.A., Queen's	Eng. & Hist., Phys. Cul.		1920	5½	2½	.....	.....	1,700
	Guthrie, Ethel R.	B.A., Queen's	Mods. and Hist., Phys. Cul.		1920	4½	....	.....	.....	1,600
	Graham, Herbert W...(Int.)	B.A., Queen's	Phys. Cul.		1920	4	¼	.....	1,800	.....
	Pirie, Lizzie B.		Com.	Phys. Cul.	1920	4½	1	.....	.....	1,700
	Henry, Esther A.	B.A., Tor.	Art		1920	3¼	4½	.....	.....	1,380
	Keagey, Jessie L.	B.A., Tor.	Phys. Cul. (Int.)		1916	6	1½	.....	.....	1,437
Brantford	Overholt, Arthur M.	M.A., McM.	Math.		1918	19½	½	3,400	.....	.....
	Burt, Arthur W.	B.A., Tor.	Mods. and Eng.		1893	42	....	.....	2,500	.....
	Coates, Daniel H.	B.A., Tor.	Math.		1893	33	....	.....	2,375	.....
	Passmore, Samuel F.	M.A., Tor.	Classics		1885	40	....	.....	2,375	.....
	Bunnell, Effie M.	B.A., Tor.	Eng., Fr. and Ger.		1891	29	....	.....	.....	2,375
	Erwin, Willis M.	B.A., Queen's	Science	Agr. & Hor.	1918	4½	....	.....	2,375	.....
	Matthews, Alma M.	B.A., McM.	Eng. & Hist. (Int.), Art.		1917	3½	1	.....	.....	1,800
	Millar, Frederick G.	B.A., Tor.		Phys. Cul.	1919	17	....	.....	2,075	.....
	Franklin, Helen A.	B.A., Tor.	Eng. & Hist. (Int.)	Phys. Cul.	1918	4½	....	.....	.....	1,900
	McFadden, Robt. W. E.	B.A., Tor.			1916	5½	½	.....	2,075	.....
	Hanna, Lorna	B.A., Tor.	Eng. & Hist., Phys. Cul.		1917	4	....	.....	.....	1,700
	Hately, Enid Mary	B.A., Tor.		Phys. Cul.	1918	2½	....	.....	.....	1,700
	Ryan, Gertrude				1912	11	....	.....	.....	1,700
	McAllister, Annie G.		Phys. Cul. (Int.)		1917	13	1½	.....	.....	1,700
	Runnings, Joseph B. C.		Phys. Cul. (Int.)		1920	4½	1	.....	2,000	.....
	Willoughby, Annie J.		Phys. Cul. (Int.)		1917	10½	5	.....	.....	1,700
	Shultis, Adam		Com.		1896	24	11	.....	2,375	.....
	Dixon, Nora G.		Com.	Phys. Cul., Art.	1915	5½	2	.....	.....	1,700

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Brantford—*Con.*	Hartley, Edna E.		(Household Sc. Instr.)		1918	6¼	4			1,450
	Mutter, James A. (Int.)		(Man. Train. Instr.)		1919	5			2,200	
Brockville	Husband, Almeron J. *	B.A., Tor.	Eng. & Hist., Fr. & Ger.		1895	25	3	3,100		
	Thompson, Alva E.	B.A., Queen's	Math. & Phys. (Int.)		1919	4			2,300	
	Butcher, Frank H.	B.A., Tor.	Classics	Phys. Cul.	1920	4¼			2,200	
	Anderson, John A.	B.A., Queen's	Science (Int.)	Ag.&Hor., F.M.	1920	5¼	4		2,200	
	Beattie, Lewis S.		Phys. Cul.		1910	12			2,100	
	Giles, A. Edith		Art		1890	31	3			1,800
	Smith, Margaret		Com.	Art	1920	26	3			1,600
	Roberts, Mabel E.	B.A., Queen's	Art		1920	4¼	3			1,500
	Lewis, Marjorie B. (Int.)	B.A., Queen's	Phys. Cul.		1920	1¼				1,500
	Hammell, Ethel E. M.	B.A., Tor.	Eng and Hist.	Phys. Cul.	1920	3¼	9			1,600
Chatham	Twohey, William J.	M.A., Tor.	Classics		1904	36		3,200		
	Sexsmith, William N.	B.A., Tor.	Eng. and Hist.		1907	16¼	3		2,500	
	Houston, Jessie	B.A., Tor.	Mods. and Hist.		1913	16¼				2,200
	Asselstine, Oliver	M.A., Queen's	Math.		1915	13¼			2,500	
	Challinor, John L.		Phys. Cul		1919	7			1,900	
	Kirk, Gladys R.		Phys. Cul. (Int.), Art.		1917	6¼	1			1,700
	Haydon, William J.	M.A., McM.	Science	Phys. Cul.	1917	9¼			2,500	
	Brimicombe, Bessie F.		Com.	Art, Phys. Cul.	1918	8	3			1,800
	Hewitt, Cora E.	B.A., Tor.	Mods. & Hist., Phys. Cul.		1919	8½	2½			1,900
	Ross, Margaret C.	B.A., Trin., Dub.	Phys. Cul. (Int.)	Art	1919	6				1,600
	Ord, Annie Lillian		Phys. Cul		1921	2	6			1,600
	Campbell, Clara L.		(Household Sci. Instr.)		1918	3	8½			1,600
	Mitchell, William J. (Int.)		Man. Train.		1920	¼	1		1,800	

Clinton	Trealeaven, John W.	B.A., Tor.	Classics	Phys. Cul.	1907	29	....	2,500	.....	.....
	Macdougall, Isabella J.	B.A., Tor.	Eng. & Hist., Fr. & Ger.	.....	1910	14½	3	.....	.....	1,750
	Mangan, Mary F....(Temp.)	B.A., Queen's	.....	.....	1921	½	....	.....	.....	2,000
	Helmkay, Dora L. ....(Int.)	B.A., Queen's	Math.	Phys. Cul.	1919	1½	....	.....	.....	1,700
	Edwards, Rebecca S.	.....	Art, Phys. Cul. ....(Int.)	.....	1919	11½	9	.....	.....	1,700
	Linklater, Jessie L. ...(Int.)	.....	.....	Art, Phys. Cul.	1920	3	13	.....	.....	1,000
Cobourg	Arthur, Colin C.	M.A., Queen's	Science	.....	1893	29	1	2,700	.....	.....
	Jones, Laura L.	B.A., Tor.	Eng., Fr. and Ger.	.....	1898	27½	....	.....	.....	1,800
	Davidson, Robert D. P.	B.A., Queen's	Science	P.C.,A.&H.,F.M.	1916	5½	4	.....	2,000	.....
	Hickey, Philippa A. V.	.....	Phys. Cul.	.....	1916	8½	5	.....	.....	1,300
	Elcoat, Hazel I.	.....	Com., Art	Phys. Cul.	1916	5	1½	.....	.....	1,800
	McKenzie, Russell N.	B.A., Tor.	Math. & Phys.	Phys. Cul.	1919	5½	....	.....	2,000	.....
	Affleck, Elsie J.	M.A., Tor.	Phys. Cul. (Int.), Classics	.....	1920	7½	....	.....	.....	1,800
	Schultz, Marvin L.....(Int.)	B.A., Tor.	Phys. Cul.	.....	1920	1	....	.....	2,000	.....
	Boggs, Grace	.....	(Household Sci. Instr.)	.....	1917	3½	7½	.....	.....	800
Collingwood	Willoughby, Henry A. G.	M.A., Tor.	Science	.....	1919	3½	5½	2,900	.....	.....
	Atkinson, Wm. D. T.	B.A., Tor.	Phys. Cul. (Int.), Classics	.....	1919	4	....	.....	2,500	.....
	Muirhead, Jessie L.	B.A., Tor.	Math. & Phys., Phys. Cul	.....	1918	3	3	.....	.....	2,000
	Ball, Emerson E.	B.A., Tor.	Mods. and Hist.	.....	1919	13½	....	.....	2,400	.....
	Wilkie, Marion F.	B.A., Tor.	Fr. and Ger.	Phys. Cul.	1919	10	....	.....	.....	1,900
	Hind, Edith J.	B.A., Queen's	Com. .....(Int.)	.....	1919	12	3½	.....	.....	1,900
	Sinclair, Margaret	.....	Art	Phys. Cul.	1919	4½	13	.....	.....	1,600
	Parkhouse, Ezra E. ..(Int.)	.....	(Man. Train. Instr.)	.....	1920	½	1	.....	1,600	.....
	Douglas, M. Leona ....(Int.)	.....	(Household Sci. Instr.)	.....	1920	½	2	.....	.....	1,000
Fort William	Wood, Elmore E.	M.A., McM.	Phys. Cul., Math.	.....	1912	17½	2	3,500	.....	.....
	Parlee, Edith	.....	Art, Com.	.....	1908	26½	10	.....	.....	2,600
	Grant, Christine C.	B.A., Tor.	Mods. and Hist.	.....	1908	17½	9	.....	.....	2,600
	Cornell, Maurice L.	M.A., Queen's	Math.	.....	1910	13½	....	.....	2,600	.....
	Ogilvie, Alvin I.	B.A., McM.	Mods.&H.(Int.),Eng.&Hist.	.....	1914	11½	....	.....	2,600	.....
	Breslove, David	M.A., Tor.	Classics	Phys. Cul.	1919	3½	....	.....	2,600	.....
	MacLaurin, James L.	M.A., McM.	Science	Phys. Cul.	1918	9	....	.....	2,600	.....
	Millar, Maude	.....	Art, Phys. Cul. ....(Int.)	.....	1917	6	½	.....	.....	1,800
	McGregor, Annie K.	B.A., Queen's	Phys. Cul.	.....	1919	11	....	.....	.....	2,200
	Learoyd, Clarence W.	B.A., Tor.	Phys. Cul.	Farm Mech.	1919	2½	3	.....	2,200	.....
	Fritz, Olive E.	.....	Com.	.....	1919	10	....	.....	.....	2,200
	McLachlan, Christena R.(Int.)	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1920	3	4	.....	.....	1,600
	Everson, Evelyn M.	.....	Household Sci.	.....	1914	8½	5	.....	.....	2,000
	DeGroat, Charles M.	.....	Man. Train. .....(Int.)	.....	1918	3½	3	.....	2,000	.....

*Qualified to teach Spanish.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

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								Principal	Male Assistants	Female Assistants
								$	$	$
Galt	Gundry, Arthur P.	B.A., Tor.	Science	Ag. & H., F. M.	1914	29½	....	3,200	.....	.....
	Carscadden, Thomas	M.A., Tor.	Eng. and Hist.	.....	1881	45	3	.....	2,350	.....
	Hamilton, Robert S.	M.A., Tor.	Science	.....	1894	31	....	.....	2,350	.....
	Carter, Janet W.	M.A., Tor.	Eng. & H. (Int.), Fr. & Gr.	.....	1901	28	....	.....	.....	2,350
	Hardy, John H.	B.A., Tor.	Classics, Phys. Cul.	.....	1920	4½	....	.....	2,350	.....
	Challen, Newton E.	B.A., McM.	Math., Phys. Cul.	.....	1920	9½	3	.....	2,350	.....
	Fraser, Lulu B.	.....	Phys. Cul. (Int.), Art	.....	1916	8½	2½	.....	.....	1,650
	Weatherill, Helen E. M.	.....	Com., Art	Phys. Cul.	1918	9½	1	.....	.....	1,650
	McKee, William C. (Int.)	.....	Phys. Cul.	.....	1919	1½	5½	.....	1,650	.....
	Harding, Mary J.	B.A., Tor.	Phys. Cul. (Int.)	.....	1919	3	½	.....	.....	1,650
	Hinchley, John M. (Int.)	.....	Phys. Cul.	.....	1920	½	5½	.....	1,650	.....
	Quinn, Mamie Gladys	.....	Com., Art	.....	1920	4	1½	.....	.....	1,650
	Rayfield, Fred W. (Int.)	B.A., McM.	.....	Phys. Cul.	1921	....	4	.....	1,650	.....
	Phelan, Frank J.	.....	Manual Training (Int.)	.....	1916	6½	5	.....	1,900	.....
	Baillie, Grace S. T. (Int.)	B.A., Tor.	Ho. Sci., Phys. Cul.	.....	1920	1½	....	.....	.....	1,650
Goderich	Hume, John P.	B.A., Queen's	Science	Agr. & Hor.	1911	29	....	2,500	.....	.....
	Robertson, Alexander M.	M.A., Queen's	Math., Fr. and Ger.	.....	1908	25½	3	.....	2,000	.....
	Clifford, Margaret K.	M.A., B.Pæd., Qn's.	Mods. & Hist., Eng. & Hist.	.....	1912	13½	5	.....	.....	2,000
	Fletcher, Beatrice L.	B.A., Tor.	Classics	Phys. Cul.	1919	10½	2½	.....	.....	1,700
	Hodge, Gertrude Agnes	B.A., Tor.	Phys. Cul. (Int.)	.....	1909	12	1	.....	.....	1,600
	Anderson, Beatrice E.	.....	Com. Art (Int.)	Phys. Cul.	1919	10½	3	.....	.....	1,750
	Govenlock, Janet S.	.....	Art	.....	1918	3½	1	.....	.....	1,400
Guelph	Davison, James	B.A., Vic.	Math.	.....	1892	46	2	2,600	.....	.....
	Skinner, Kate C.	B.A., Tor.	Eng., Hist., Fr. & Ger.	.....	1895	26	1	.....	.....	2,000

	Charlesworth, John W.	B.A., Queen's			1915	30	3½		2,425	
	Leckie, Bruce E.	B.A., McM.	Sci.	Phys. Cul.	1921	10½	2		2,400	
	Urquhart, Mrs. Ethel K.	B.A., Tor.	Classics		1919	13½				2,000
	Blyth, Sara		Com.		1910	15½	7			1,800
	Humphries, B. Rowena		Art		1913	11	3			1,600
	Knight, Florence I.	B.A., Tor.	Art ....(Int.), Phys. Cul.		1918	3½				1,500
	Shaw, Elsie M. ....(Int.)				1918	2½	½			1,250
	Worden, Ernest H. G.		Phys. Cul.		1919	3½			1,600	
	Baxter, Helen F. ....(Int.)	B.A., Queen's		Phys. Cul.	1920	1½	1½			1,500
	Pigott, Margaret			Phys. Cul.	1920	2½	8			1,300
Hamilton	Turner, John B.	B.A., Queen's	Math., Science		1885	39	3	3,900		
	Hogarth, Eber S.	B.A., Tor.	Eng., Fr. and Ger.		1892	32			3,500	
	McGarvin, Michael J.	B.A., Tor.	Mods. and Hist.		1919	12	2		3,300	
	Simpson, Benjamin L.	M.A., Queen's	Math.		1905	15½	3		3,300	
	Johnston, George L.	B.A., Queen's	Art, Com.		1888	33	3		2,950	
	Morris, Arthur W.	M.A., Tor.	Classics		1906	16	5		3,300	
	Morrison, Edward	B.A., Tor.	Science, Math.		1907	14½	6		3,300	
	Armstrong, George F.	B.A., Tor.	Math.		1907	18½	1½		2,950	
	Marshall, Charles F.	B.A., Tor.	Science		1909	13½			2,850	
	Freeman, John A.	B.A., Tor.	Classics		1909	32			2,850	
	McGee, Cyril H.	B.A., Trin.	Math.		1909	24			2,850	
	Collins, Herbert E.	B.A., Tor.	Mods. and Hist.		1911	14½			2,850	
	Sheppard, Alton M.	B.A., Tor.	Math.		1911	12	2½		2,750	
	Edwards, John J.	B.A., Queen's	Fr. and Ger.		1919	10	6		2,700	
	Price, Charles F.	B.A., Tor. & West.	Eng. and Hist.		1913	10	8		2,700	
	Foucar, Walter K.	M.A., Tor.	Eng. & Hist., Fr. & Ger.		1914	25½			2,650	
	Beck, Clinton G.	B.A., Queen's	Mds. & H., (Int.), E. & H.		1914	7½	½		2,500	
	Pugh, Harry C.	B.A., Tor.	Science ....(Int.)		1915	6½	2½		2,450	
	Devitt, S. Girvin	B.A., Tor.			1915	6½	2		2,400	
	Gordon, James I.	B.A., Tor.	Phys. Cul. ....(Int.)		1918	2½	3½		2,300	
	Clarke, Walter	B.A., McM.	Classics		1919	5½			2,500	
	Elliott, Henry E.	B.A., Queen's			1919	12½	3		2,300	
	McCrimmon, Leon Ross	M.A., McM.	Science ....(Int.)		1919	6½			2,300	
	Hill, Mary A.		Art ....(Int.)		1909	19	4			1,700
	Edwards, Mabel C.		Phys. Cul.		1908	14½				1,700
	Brown, Margaret S.	B.A., Tor.	Phys. Cul.		1917	3½	2			1,700
	Ettinger, Karl F. ....(Int.)	B.A., Queen's		Phys. Cul.	1920	½			2,100	
	Teeter, Clarence G. ....(Int.)	B.A., McM.	Science	Phys. Cul.	1920	½			2,100	
	Taylor, Frederick		(Man. Train. Instr.)		1918	8	3		2,100	
	Mitchell, Lola K. ....(Int.)	B.A., Tor.	Ho. Sci.	Phys. Cul.	1920	½				1,700
	Cornelius, John R.		(Phys. Cul. Instr.)		1919	1½			2,300	

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								Principal	Male Assistants	Female Assistants
								$	$	$
Ingersoll	Shales, William E.	M.A., B.Pæd., Q'ns.	Science, Phys. Cul.	Agr. & Hor. .	1914	6½	4	3,000	.....	.....
	Hudson, Annie L.	.....	Com. Art	Phys. Cul. ...	1917	7½	12½	.....	.....	1,800
	Martin, Jean E.	B.A., Tor.	Math. and Phys.	Phys. Cul. ...	1918	4½	....	.....	.....	1,900
	Roach, Edith E. .....(Int.)	B.A., Tor.	Mods. & Hist., Phys. Cul..	.....	1919	1½	....	.....	.....	1,700
	Clark, Olive L. .....(Int.)	B.A., McM.	Classics	Phys. Cul. ...	1919	1½	....	.....	.....	1,800
	Dinsmore, Herbert B. (Int.)	B.A., Tor.	Phys. Cul.	.....	1920	1½	....	.....	1,800	.....
	Garrow, Ada M.....(Int.)	B.A., Tor.	Eng. & Hist.	Phys. Cul. ...	1921	½	....	.....	.....	1,500
	Kendall, Sybel M.....	B.A., Tor.	Household Sci.	Phys. Cul. ...	1918	2½	....	.....	.....	1,350
	Weir, Norman L. .....(Int.)	.....	(Man. Train. Instr.)	.....	1919	1½	3½	.....	1,600	.....
Kingston	Sliter, Ernest O.	M.A., Tor.	Classics	.....	1888	33	....	3,700	.....	.....
	Otto, George S.	B.A., Queen's	Phys. Cul., Mods. and Hist	.....	1917	6½	3	.....	2,400	.....
	Saunders, William J.	M.A., Qn's., M.S., Chi.	Science	.....	1908	20½	3	.....	2,400	.....
	Shurtleff, William M.	B.A., Queen's	Art, Com.	.....	1913	11½	8	.....	2,400	.....
	Chown, Hattie L.	.....	.....	.....	1905	16	20	.....	.....	1,750
	Fraser, James W.	B.A., Tor.	Eng. and Hist. ....(Int.)	.....	1904	17½	10	.....	2,350	.....
	Hedley, William P.	B.A., Tor.	Math.	.....	1908	16½	8	.....	2,300	.....
	Henstridge, Elizabeth	M.A., Queen's	Fr. and Ger., Eng., Hist..	.....	1907	19½	7	.....	.....	2,150
	Hitsman, Samuel A.	B.A., Queen's	Com. .....(Int.)	.....	1916	6½	20	.....	2,150	.....
	Kelly, James W.	B.A., Queen's	.....	.....	1912	8½	15	.....	2,150	.....
	McCormack, Mary Irene	B.A., Queen's	Phys. Cul. .....(Int.)	.....	1919	13	....	.....	.....	1,850
	Shaver, Charles A.	B.A., Queen's	Classics	Phys. Cul. ...	1919	11½	4½	.....	2,250	.....
	Stock, Dora H.....(Int.)	M.A., Queen's	Mods. and Hist.	Phys. Cul. ...	1919	2½	....	.....	.....	2,050
	Hiscock, May B.	B.A., Queen's	Phys. Cul.	.....	1920	10½	....	.....	.....	1,650
	Macpherson, Jean M. ..(Int.)	B.A., Queen's	.....	Phys. Cul. ...	1920	1½	....	.....	.....	1,500
	McPhail, Mary C. ....(Int.)	B.A., Queen's	Phys. Cul. .....(Int.)	.....	1920	1½	....	.....	.....	1,500
	Strader, Jamie W. ....(Int.)	B.A., Queen's	.....	Phys. Cul. ...	1920	½	2	.....	1,800	.....
	Werte, Mary M.....(Int.)	B.A., Queen's	.....	Phys. Cul. ...	1920	1½	1	.....	.....	1,500
	Palmer, George A.....	.....	(Drill Instructor)	.....	1910	10	....	.....	1,100	.....

Kitchener-Waterloo ..	Forsyth, David	B.A., Tor.	Math.		1901	43½	1	3,000	.....	.....
	Brown, Harry W.	B.A., Queen's	Art		1905	15½	17	.....	2,700	.....
	Pugsley, Edmund	B.A., Vic.	Science	Agr. & Hor.	1909	30	....	.....	2,500	.....
	Kerr, Charles S.	B.A., Tor.	Classics, Eng. and Hist.		1911	33	....	.....	2,500	.....
	Erb, Maurice	B.A., Queen's	Eng. and Hist.		1917	4½	5	.....	2,400	.....
	Hubbs, Mary W.	B.A., Queen's	Fr. and Ger.	Phys. Cul.	1919	5½	....	.....	.....	1,800
	Mallory, Bertha	.....	Phys. Cul., Com.	Art	1913	13½	10	.....	.....	1,800
	Lee, Anna A.	.....	Art (Int.)		1912	11	4	.....	.....	1,500
	Barber, Etta L.	.....	.....		1914	8½	5½	.....	.....	1,500
	Jones, Stephanie W.*	.....	Phys. Cul.		1915	5	½	.....	.....	600
	Pengelley, Olympus R.	.....	Manual Training		1919	6	5	.....	2,100	.....
	Maus, Adah (Int.)	B.A., Tor.	Household Sci.	Phys. Cul.	1920	1½	....	.....	.....	1,500
	Samson, Paul A.	.....	(Physical Instr.)		1920	....	....	.....	900	.....
Lindsay	Kirkconnell, Thomas A.	B.A.,Qn's, LL.D.,Tor.	Math.		1908	35	3	3,375	.....	.....
	Jennings, Edwin Wm.	B.A., Tor.	Eng. and Hist.		1909	18	4	.....	2,500	.....
	Firth, Thomas	M.A., Tor.	Science	Agr. & Hor.	1912	10½	2½	.....	2,500	.....
	Hambly, Philo K. (Int.)	B.A., McM.	Classics		1918	3½	....	.....	2,375	.....
	Johnson, Alfred	B.A., Queen's	Phys. Cul. (Int.)		1916	4½	....	.....	2,250	.....
	Lucas, Gavin A.	B.A., Tor.	Com.	Art	1910	18	6	.....	2,500	.....
	Montgomery, Mayme I.	B.A., McM.	Art, Fr. and Ger.		1917	7½	....	.....	.....	2,125
	Corkery, Florence	M.A., Queen's	Art, Eng. & Hist.		1919	13	3	.....	.....	1,750
	Moir, Catherine E.	.....	.....		1908	26½	4	.....	.....	1,750
	Shook, Muriel A.	.....	Art, (Int.), Phys. Cul.	Agr. & Hor.	1918	8½	....	.....	.....	1,750
	Davis, Eleanor A.	B.A., Tor.	Phys. Cul.		1919	3½	½	.....	.....	1,625
London	Mooney, Wm. H. T.	B.A., Tor.	Classics		1903	18½	6	3,600	.....	.....
	Riddell, Frank P.	B.A., Tor.	Classics		1898	31	....	.....	2,600	.....
	MacDonald, George L.	B.A., Tor.	Eng., Fr. and Ger.		1908	28	7	.....	2,650	.....
	Martin, Stephen	B.A., Tor.	Math.		1912	34	3½	.....	2,600	.....
	Calvert, Joseph F.	M.A., McM.	Science	Agr. & Hor.	1909	16	1½	.....	2,600	.....
	Firth, Joseph W.	B.A., Tor.	Science		1914	13	2	.....	2,600	.....
	Gray, Neil R.	B.A., Tor.	Mods. and Hist.		1904	17½	3	.....	2,750	.....
	Dickinson, James A.	.....	Com.		1895	34	4	.....	2,650	.....
	Buchanan, John A.	B.A., Queen's	Com.		1907	19	3½	.....	2,500	.....
	Walker, Arthur J.	B.A., Queen's	Com.		1908	17½	8	.....	2,550	.....
	Cameron, John H.	.....	.....		1911	22	9	.....	2,500	.....
	McNeil, William G.	B.A., Queen's	Eng. and Hist.		1918	5½	3½	.....	2,600	.....
	Goldstick, Isidore	M.A., Tor.	Mods. and Hist.		1917	3½	....	.....	2,500	.....
	Bluett, Claude K.	B.A., Queen's	.....		1912	8½	14	.....	2,400	.....
	Miller, Everton A.	M.A., McM.	Classics		1918	8½	3	.....	2,500	.....
	Urlin, William R.	B.A., Queen's	Math.	Phys. Cul.	1919	3½	1½	.....	2,500	.....

*Qualified for Physical Culture only.

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								Principal	Male Assistants	Female Assistants
								$	$	$
London—*Con.*	Menhennick, Ada M.	B.A., McM.	Mods., and Hist.		1914	8½	3½	.....	.....	2,100
	McCamus, Bessie	B.A., Tor.	Eng. and Hist., Art		1913	11	....	.....	.....	2,100
	Kelso, Alice C.	.....	.....		1897	25½	2½	.....	.....	2,100
	Winnett, Violet E.	B.A., Western	.....		1912	8½	23	.....	.....	2,100
	Oates, Thomas W.	B.A., Queen's	Com.		1915	9½	2	.....	2,500	.....
	Blake, Richard J.	.....	Com.		1915	12½	2	.....	2,550	.....
	Davidson, S. Kelso	.....	(Art Instructor)		1887	40	....	.....	1,200	.....
	Syme, John J.*	.....	Phys. Cul.		1916	15½	....	.....	2,100	.....
	Morgan, Pearl S.	.....	Phys. Cul. Com.		1919	4½	2	.....	.....	2,100
	Squire, William J.	.....	Phys. Cul. (Int.), Com		1919	6½	3½	.....	2,200	.....
	Buck, Charles S.	.....	Art, Phys. Cul.		1919	6½	1½	.....	2,200	.....
	McCann, Dorothy ....(Int.)	.....	.....		1919	1½	2	.....	.....	1,700
	McEachern, John G	B.A., Queen's	Eng. and Hist.		1920	12½	4½	.....	2,500	.....
	Dolan, John H.	B.A., Queen's	Classics		1920	22½	....	.....	2,550	.....
	Brown, Duncan	M.A., Queen's	Science .....(Int.)		1920	4½	4½	.....	2,500	.....
	Hofferd, Mrs. Florence V....	B.A., Tor.	Mods. and Hist.		1920	4½	....	.....	.....	1,700
	Carr-Harris, Mrs. Marion (Int.)	B.A., Queen's	.....		1920	1½	....	.....	.....	1,700
	Jackson, Katherine M.	B.A., Tor.	Phys. Cul., Mods and Hist.		1920	11	....	.....	.....	1,700
	Skelton, Minnie M. ...(Int.)	B.A., West.	Art		1920	½	30	.....	.....	1,700
	Adams, William A.	.....	Manual Training		1917	11	20	.....	2,400	.....
	Macpherson, Mary C.	B.A., Queen's	(Household Sci. Instr.)		1908	18	....	.....	.....	2,200
	Tanton, Francis	.....	Phys. Cul. (Int.), Man. T.		1920	13½	7	.....	2,000	.....
Morrisburg	O'Neill, Morgan J.	M.A., Queen's	Math. & Phys. ....(Int.)		1919	6½	2½	2,500	.....	.....
	Boyd, Annie A.	M.A., Queen's	Com., Science		1907	16½	8	.....	.....	2,000
	Carscadden, Helen M.B. (Int.)	B.A., Tor.	Art		1921	2	....	.....	.....	1,700
	Baird, Mabel M.	B.A., Tor.	Mods. and Hist.		1919	11	....	.....	.....	1,500

	Blakeley, Alexander W. (Int.)	B.A., Tor.		Phys. Cul.	1920	½	....	.....	1,500	.....
Napanee	Maclean, Godwin V.	M.A., Tor.	Math.		1913	28	1⅓	2,200	.....	.....
	Baker, Sarah J.		Com.	Phys. Cul.	1914	15½	2½	.....	.....	1,600
	Ross, Frances C. (Int.)	B.A., Tor.	Classics	Phys. Cul.	1919	1½	....	.....	.....	1,600
	O'Reilly, B. Teresa	B.A., Tor.	Mods. & H., Ph. Cul. (Int.)		1920	3	....	.....	.....	1,600
	Gillard, Leah A.		Art		1920	7	1	.....	.....	1,600
	McEachran, Mary	B.A., Queen's			1920	14½	7	.....	.....	2,000
	Fielding, Ewart L. (Int.)	B.A., Tor.	Phys. Cul.		1921	½	....	.....	2,000	.....
Niagara Falls	Dickson, James D.	B.A., Tor.	Math.		1893	33	3	3,100	.....	.....
	Walker, David M.		Com.		1893	31	16	.....	2,500	.....
	Will, George E.	B.A., Tor.	Classics		1901	20½	3	.....	2,500	.....
	Bielby, George H.	B.A., Tor.	Science		1913	13½	7	.....	2,500	.....
	Howson, Alexandra A.	B.A., Queen's	M. & H. (Int.), F. & G., Ph. Cl.		1916	11	2	.....	.....	2,100
	Whitelock, Stanley G. (Int.)	B.A., Tor.	Phys. Cul.		1918	2½	3	.....	2,200	.....
	Dickson, Helen M.	B.A., Queen's	Com., Art (Int.)	Phys. Cul.	1920	7½	2	.....	.....	2,000
	VanAlstyne, Susan A.	B.A., Tor.	Math.		1918	8	3½	.....	.....	2,100
	Herington, Bertha C.	B.A., Tor.	Phys. Cul. (Int.) Mods. and Hist.		1921	3½	....	.....	.....	2,000
	Grainger, Luella	B.A., Queen's			1921	8½	2	.....	.....	1,700
	McLean, Lea Nora (Int.)		Art		1921	1½	2½	.....	.....	1,700
	Mitchell, Janet A. (Int.)	B.A., Tor.	Household Sci., Phys. Cul.		1919	2½	6	.....	.....	1,800
	Currie, William F. (Int.)		(Man. Train. Instr.)		1920	½	....	.....	1,800	.....
North Bay	Wallace, Frank D.	M.A., Queen's	Math.		1913	10½	....	2,750	.....	.....
	Devitt, Leslie K. (Int.)		Phys. Cul.		1920	1½	1	.....	2,200	.....
	Whyte, Marion I.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	11	1	.....	.....	1,800
	Colbeck, Marjorie M.	B.A., Tor.	Classics	Phys. Cul.	1920	6½	....	.....	.....	1,800
	Taylor, May M.	B.A., Queen's	Eng. and Hist. (Int.)	Phys. Cul.	1920	4	5	.....	.....	1,600
	King, Eva W.	B.A., Tor.	Phys. Cul.		1920	6	....	.....	.....	1,700
	Ewing, Florence M.	B.A., Queen's	Phys. Cul. (Int.)		1920	16½	2	.....	.....	1,600
	Scott, Jessie M.			Phys. Cul.	1920	9½	2⅓	.....	.....	1,700
	McGregor, Pearl				1921	7	3½	.....	.....	1,500
Orillia	Lillie, John T.	B.A., Vic.	Classics		1910	33½	....	3,000	.....	.....
	McGill, David H.	M.A., Queen's	Science		1914	9	3½	.....	2,500	.....
	Robb, George W. (Int.)	B.A., McM.	Math. and Phys., Ph. Cul.		1920	3½	1½	.....	2,000	.....
	Watterworth, Grace M.		Com.		1914	19½	2	.....	.....	2,100
	Cryderman, May	B.A., Tor.	Eng. and His.	Phys. Cul.	1918	6½	....	.....	.....	1,800
	Lees, Margaret A.	B.A., Queen's	Ph. Cl. (Int.), Mods. & H.		1920	3½	4	.....	.....	1,600

*Qualified for Physical Culture only.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Orillia—*Con...*	Hamilton, Agnes I.	.....	Art	Phys. Cul. ...	1919	7½	....	.....	.....	1,650
	Steele, Walter S.	B.A., Queen's.....	Phys. Cul. .....(Int.)	.....	1920	3½	7½	... ..	1,800	.....
	Carrie, Violet G.	B.A., Tor.	Phys. Cul.	.....	1920	2½	....	.....	.....	1,300
Ottawa	McDougall, Alex. H.	B.A.,Tor.,LL.D.,Qn's	Math.	.....	1889	35½	....	4,500	.....	.....
	Norris, Isaac T.	B.A., Queen's	Math.	.....	1898	25	....	.....	3,200	.....
	Stothers, Robert	B.A., Queen's	.....	.....	1887	34	8	.....	3,200	.....
	Gilchrist, Dugald A.	B.A., B.Pæd., Tor..	Eng. and Hist.	.....	1912	15½	7	.....	3,200	.....
	Smeaton, William	B.A., Tor.	Science	.....	1906	20½	1½	.....	3,100	.....
	Muir, Jessie	M.A., Queen's	Fr. and Ger.	.....	1909	11½	8	.....	.....	2,900
	Hood, Finlay	B.A., Queen's	Com. (Int), Art	.....	1906	16	7	.....	3,200	.....
	Simpson, Robert S.	B.A., Queen's	Com.	.....	1903	22	9	.....	3,200	.....
	Tomkins, Elizabeth A.	.....	.....	.....	1902	18½	19	.....	.....	2,800
	Mann, Harry Clarke	B.A., McM.	.....	.....	1907	13½	6	.....	2,900	.....
	Graham, William A.	B.A., Tor.	.....	.....	1908	22½	3	.....	2,900	.....
	Kaiser, Jesse B.	.....	.....	.....	1909	27	4	.....	2,900	.....
	Mabee, George E.	B.A., Tor.	Classics, Fr. and Ger. ...	.....	1910	27½	....	.....	3,000	.....
	Lane, James S.	B.A., Tor.	Fr. and Ger.	.....	1911	24	....	.....	2,900	.....
	Stewart, George B.	B.A., Queen's	Math.	.....	1911	11½	2	.....	2,900	.....
	Smith, Henry Lloyd	.....	Com.	.....	1912	11	6½	.....	3,000	.....
	Howie, James R.	.....	.....	Phys. Cul. ...	1914	7½	....	.....	2,560	.....
	Anderson, Frank C.	B.A., M.D.,C.M.,Qn's.	Science, Com.	.....	1914	15½	5	.....	2,900	.....
	Latour, Charles A.	B.A., B.L., Laval....	.....	.....	1914	6½	1	.....	2,400	.....
	Stuart, Frederick A.	M.A., Tor.	Science	.....	1915	25	....	.....	2,900	.....
	Batstone, A. Thomas	B.A., Queen's	.....	.....	1915	10½	1½	.....	2,500	.....
	MacMinn, Marie	B.A., Queen's	Mods.&H., P.C.(Int.),E.&H.	.....	1915	5½	....	.....	.....	2,100

	Gilhooly, Beatrice C.	B.A., Queen's	Eng and Hist.		1915	5½	....	.....	.....	2,200
	Hills, Minnie B.	B.A., Tor.	Math.		1916	19	....	.....	.....	2,600
	Johnston, Agnes M.	.....	Art, Com.	Phys. Cul.	1916	17	2	.....	.....	2,500
	Burridge, Arthur A. (Int.)	B.A., McM.	Phys. Cul.		1916	4½	....	.....	2,400	.....
	MacKay, Donald A.	M.A., Queen's	Science		1916	18½	5	.....	2,800	.....
	Redick, Claire L.	B.A., Tor.	Phys. Cul.		1917	5½	....	.....	.....	2,300
	Kilpatrick, Jessie S.	B.A., Queen's	Phys. Cul.		1918	7	1½	.....	.....	2,200
	Clothier, James O.	B.A., Queen's	Fr. and Ger. (Int.)		1919	22½	....	.....	2,900	.....
	Irwin, Norman A.	B.A., Queen's	Phys. Cul.		1919	8½	1½	.....	2,600	.....
	McCamus, William R.	B.A., Tor.	Phys. Cul. (Int.), Class.		1919	4	....	.....	2,200	.....
	Thoms, Clarence J.	B.A., McM.	Eng. and His.		1919	3½	3	.....	2,200	.....
	Forward, Mrs. Ida F.	.....	.....		1919	8½	....	.....	.....	1,800
	McKinley, Clara B.	B.A., Tor.	Classics		1920	8½	....	.....	.....	2,100
	Smith, George R.	B.A., Tor.	Math.		1920	9½	3½	.....	2,700	.....
	Cowie, Helen (Int.)	B.A., Tor.	Mods. and Hist.		1920	½	....	.....	.....	2,100
	Tennant, Herbert M.	B.A., Tor.	.....		1920	1½	3	.....	1,900	.....
	Kenyon, William A. (Int.)	B.A., McM.	Classics	Phys. Cul.	1920	½	2	.....	1,900	.....
	Locklin, Elva J.	B.A., Tor.	Art		1920	7	4	.....	.....	1,700
	Ellis, George E. (Int.)	B.A., Queen's	Phys. Cul.		1920	1½	3	.....	2,100	.....
	Holmes, A. Benjamin (Int.)	B.A., Tor.	.....	Phys. Cul.	1921	....	....	.....	2,000	.....
	Ashdown, Charles R. (Int.)	B.A., McGill	.....	Phys. Cul.	1921	....	....	.....	2,000	.....
Owen Sound	Merritt, Robert N.	B.A., Tor.	Math.		1916	21	1½	2,900	.....	.....
	Packham, James H.	B.A., Vic.	Math., Com.	Art	1884	37½	2	.....	2,400	.....
	Brown, Lyman	M.A., Tor.	Classics		1903	23½	1½	.....	2,400	.....
	Elmslie, Wallace	B.A., Tor.	Mods. and Hist.		1909	19½	....	.....	2,400	.....
	Robertson, George A.	B.A., Tor.	Science		1909	16½	5	.....	2,400	.....
	Whitely, Lester R.	B.A., Tor.	Mods. and Hist.		1910	18½	....	.....	2,400	.....
	Dowkes, William J.	.....	Phys. Cul.		1903	17	12	.....	2,000	.....
	Power, Eva A.	.....	Com.	Phys. Cul.	1918	7½	3	.....	.....	1,700
	Somerville, Eva M.	.....	Art	Phys. Cul.	1918	6	....	.....	.....	1,500
	DeFoe, Eugenie M.	B.A., Tor.	Art (Int.), Phys. Cul.		1918	4½	5	.....	.....	1,600
	Edgar, Margaret (Int.)	B.A., McM.	.....	Phys. Cul.	1919	1½	3½	.....	.....	1,450
	Prichard, Frances P.	.....	(Household Sci. Instr.)		1906	14	....	.....	.....	1,450
	Capel, John (Int.)	.....	(Man. Train. Instr.)		1919	2½	3	.....	2,000	.....
Perth	Trench, William W. A.	B.A., Tor.	Phys. Cul., Classics	Com.	1918	16½	5	2,400	.....	.....
	Mott, Stella K.	B.A., Tor.	Art, Eng. and Hist.		1918	9½	4	.....	.....	1,800
	Philp, Nellie M.	B.A., Queen's	Phys. Cul., Science		1918	5	4	.....	.....	1,800
	Raitt, Helena G.	M.A., Queen's	Fr. and Ger.	Phys. Cul.	1919	8	1	.....	.....	1,800
	Humphries, Wilhelmina M.	B.A., Queen's	Math. and Phys.		1918	6½	....	.....	.....	1,800
	McIlraith, Margaret I. (Int.)	B.A., Queen's	.....		1920	2	1	.....	.....	1,300
	Reid, Edith L.	.....	Art, Com.		1920	12½	6½	.....	.....	1,800

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

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								Principal	Male Assistants	Female Assistants
								$	$	$
Peterborough..	Kenner, Henry R. H.	B.A., Tor.	Classics		1893	32⅓	½	3,600	.....	.....
	Pettit, Louis J.	B.A., Queen's	Eng. and Hist.		1908	15⅓	3	.....	2,600	.....
	Jamieson, Clinton E.	B.A.,Qn's.,LL.B.,Man.	Phys. Cul. (Int.), Com..		1911	16½	1	.....	2,600	.....
	Morris, Francis J. A.	M.A.,Tor., B.A., Oxon.	Classics		1913	10	....	.....	2,600	.....
	Browne, Carl S.	M.A., McM.	Math. and Phys.		1914	7½	....	.....	2,600	.....
	Henry, V. Roland	M.A., Queen's	Science		1914	6½	....	.....	2,600	.....
	Wallace, Muriel J. W.	B.A., Tor.	Phys. Cul., Mods. & Hist..		1917	5½	....	.....	.....	2,475
	Zavitz, Arthur S.	B.A., Queen's	Math.	Phys. Cul.	1917	12½	3½	.....	2,475	.....
	Sanderson, Lenore A.	B.A., Queen's	Phys. Cul., Art		1917	5½	....	.....	.....	1,975
	Faint, Pearl B.	M.A., Tor.	Mods. and Hist		1918	12½	....	.....	.....	2,350
	Richardson, Lorne M...(Int.)	B.A., Tor.			1919	1½	3	.....	1,975	.....
	Graham, Hugh H.	B.A., McM.	Science	Agr.&Hor.,P.C.	1919	5½	....	.....	2,475	.....
	Wilder, Marion E. ....(Int.)	B.A., Tor.	Eng. and Hist.		1920	½	....	.....	.....	1,800
	Elliott, Mary M. .....(Int.)	B.A., Tor.	Com.		1920	½	....	.....	.....	1,800
Picton	Kerfoot, Horace W.	B.A., Queen's	Classics		1915	16	11	3,000	.....	.....
	Kinnee, Herbert C.	B.A., Tor.	Ph. Cl., Math. and Phys...		1918	6½	2	.....	2,000	.....
	Clinton, Nell M.	B.A., Queen's		Phys. Cul.	1918	2½	4½	.....	.....	1,400
	Redmond, E. Josephine	B.A., Queen's	Art		1919	6½	½	.....	.....	1,300
	Morton, Christine H.			Art, Phys. Cul.	1920	11½	....	.....	.....	1,200
	Barker, George A.		Com.		1920	11½	11	.....	1,900	.....
	Fyckes, Jessie D. .....(Int.)	B.A., Queen's	Mods. and Hist.	Phys. Cul.	1920	½	2	.....	.....	1,400
	Morden, Gilbert W.*	M.A.,Qns.,Ph.D.,Pen.	Science		1921	14	....	.....	2,500	.....
	Whitton, Lillis Pearl	B.A., Queen's	Fr. & Ger., Mods. & Hist..		1921	4½	....	.....	.....	1,800

Port Arthur...	Howell, William B. L.	B.A., Tor.	Classics		1904	23	....	3,600	.....	.....
	Cranston, David L.	B.A., Tor.	Math.		1907	17	....	.....	3,100	.....
	Rosevear, Howard S.	B.A.,Tor., M.A.,Harv.	Com. (Int.), Science		1910	25	....	.....	3,100	.....
	Bull, Mary Jean	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1920	2½	....	.....	.....	2,000
	Mackintosh, Agnes W.	B.A., Queen's	Eng. & Hist., Mods. & Hist.	Phys. Cul.	1920	3½	2	.....	.....	2,000
	Johnston, William B. (Int.)	B.A., Queen's	Phys. Cul.		1919	4½	24	.....	2,400	.....
	Bottoms, Emma M.		Com, Art		1921	8½	9	.....	.....	2,000
	Watson, Mabel A.		Art, Phys. Cul. (Int.)		1920	3½	1	.....	.....	1,900
	Holmes, Mary J.	B.A., Tor.	Ho. Sci.		1920	2½	....	.....	.....	1,800
	Evans, Fred J. (Temp.)		(Man. Train. Instr.)		1918	3	....	.....	1,800	.....
Renfrew	Bryan, Hugh W.	M.A., Queen's	Classics		1907	23½	....	2,800	.....	.....
	Baird, Alex. W.	M.A., Queen's	Eng., His., Fr. and Ger.		1908	12½	....	.....	2,400	.....
	Davies, Norman	B.A., McM.	Science, Phys. Cul.	Ag. & H., F.M.	1918	5½	....	.....	2,300	.....
	Higginson, Maria A.	B.A., Queen's	Math.	Phys. Cul.	1918	20	2½	.....	.....	2,000
	Richardson, Kate		Art (Int.), Com.		1920	25	8	.....	.....	1,900
	Scott, Rena C.		Phys. Cul. (Int.)		1915	9½	2	.....	.....	1,700
	Cameron, James		Phys. Cul.		1919	6½	1	.....	1,700	.....
	Ryan, Mae H.	B.A., Queen's	Art (Int.)		1919	5½	....	.....	.....	1,600
	Chalmers, C. Maude	B.A., Queen's	Mods and Hist. (Int.)		1919	3	2	.....	.....	1,300
	Coolican, Elsie T. (Int.)	B.A., Queen's		Phys. Cul.	1920	1	....	.....	.....	1,300
St. Catharines.	Coombs, Albert E.	M.A., B.Pæd., Tor.	Classics		1909	28½	....	2,800	.....	.....
	Odlum, Eleanor D.	B.A., Trin.	Mods. and Hist.		1907	17½	1	.....	.....	2,100
	Montgomery, William	B.A., Tor.	Math.		1920	18½	....	.....	2,300	.....
	Jackson, John S. (Int.)	B.A., Queen's	Science		1919	2½	2	.....	2,100	.....
	Anderson, Lillie C.		Com.		1912	17	3	.....	.....	2,000
	Dawson, Viola M. (Int.)				1920	½	6	.....	.....	1,300
	Lauder, Beatrice G.	M.A., Queen's	Eng. and Hist.		1912	9	....	.....	.....	2,000
	MacKenzie, Eva F.		Art		1914	12½	9½	.....	.....	1,850
	Bell, Lily M.	M.A., Western	Art (Int.)		1918	3½	6	.....	.....	1,400
	Moyer, Lina R.	B.A., Tor.	Phys. Cul. (Int.)		1919	3½	....	.....	.....	1,400
	Danard, Charles H.	B.A., Tor.	Phys. Cul.		1917	5½	2½	.....	1,900	.....
	Poirier, Mary H.				1916	6½	1	.....	.....	1,600
	Stark, Ethel M.	B.A., Tor.	Art	Phys. Cul.	1920	5½	....	.....	.....	1,600
	O'Connor, Kathleen B.			Art, Phys. Cul.	1919	5½	2	.....	.....	1,300
	Howie, Mabel F.		Com.	Phys. Cul.	1920	9	3	.....	.....	1,800
	Heinbecker, Edward G. (Int.)				1920	½	3	.....	1,300	.....
	Halford, Aileen M. (Int.)	B.A., Tor.		Art	1921	1½	....	.....	.....	1,300
St. Mary's ...	Lamont, Alexander D.	B.A., Queen's	Math. (Int.)	Phys. Cul.	1920	2½	4	2,400	.....	.....
	Macpherson, Mary K.	B.A., Queen's	Mods. and Hist.	Phys. Cul.	1918	3	½	.....	.....	1,450
	McLachlin, Janet E.		Art	Phys. Cul.	1920	5½	4	.....	.....	1,300
	Bonis, Harry	B.A., Tor.	Classics	Art, Phys. Cul.	1920	30	1	.....	1,800	.....

*Also holds degree of Doct-ing, Karlsruhe.

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								Principal	Male Assistants	Female Assistants
								$	$	$
St. Mary's—*Continued*..	Marlin, Lewis A.	M.A., Queen's	Science		1920	11½	7	.....	2,000	.....
	Shillinglaw, Emily ...(Int.)		Phys. Cul., Com.		1920	1½	13	.....	.....	1,800
	Stephens, James E. ..(Int.)		Phys. Cul.		1920	2	½	.....	1,500	.....
	Massecar, Ethelyn ....(Int.)	B.A., Queen's	Eng. & Hist.		1920	½	10	.....	.....	1,500
St. Thomas ..	Voaden, Arthur	M.A., Queen's	Eng. and Hist.		1903	26	2	3,000	.....	.....
	Liebner, Ernest O.	B.A., Queen's	Science		1909	27	....	.....	2,300	.....
	Gray, George L.	B.A., Tor.	Eng. and Hist.		1909	13½	....	.....	2,300	.....
	Bocking, William R.	M.A., Tor.	Ph. Cl. (Int.), Math.&Phys.		1920	8½	1	.....	2,300	.....
	Wing, Henry			Agr. and Hort.	1908	13	9	.....	2,000	.....
	Thomas, Neil J.		Art		1910	11	7½	.....	2,300	.....
	Cook, Margaret	M.A., Tor.	Eng., His., Fr. & Ger.		1903	25	....	.....	.....	2,300
	Feasby, Harold G.		Phys. Cul.		1919	4	....	.....	1,800	.....
	Stone, Alice B.		Com.		1913	18½	8	.....	.....	2,100
	Tanner, Alice M.		Com.		1915	8½	1½	.....	.....	1,900
	Edge, Mary E.	B.A., Tor.	Eng. and Hist. ....(Int.)	Art, Phys. Cul.	1920	3½	1½	.....	.....	1,700
	Tanner, Anne M.		Phys. Cul., Com. ..(Int.)	Art	1917	4½	1	.....	.....	1,700
	Clipperton, Otto L. ....(Int.)	B.A., Tor.			1921	....	....	.....	1,900	.....
	Pyke, Edgar W. .....(Int.)	B.A., McM.	Classics, Phys. Cul.		1920	½	....	.....	2,300	.....
	Traver, Lillie A.	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1920	4½	3½	.....	.....	1,700
	Hartford, Leo.				1921	5½	½	.....	1,900	.....
	Palmer, Ethel M.		Household Science		1914	7	5½	.....	.....	1,700
	Slatterie, Percy J. ....(Int.)		(Man. Train. Instr.)	Man. Train.	1920	1	....	.....	1,600	.....
Sarnia	Brown, Clarence L.	M.A., McM.	Math.		1918	11	2	3,000	.....	.....
	Grant, David M.	B.A., Tor.	Classics		1885	37	....	.....	2,500	.....
	Dent, William A.		Science		1904	23	2	.....	2,500	.....

	Story, Gladys S.	M.A., Queen's	Mods. and Hist.	Phys. Cul.	1915	18	....	.....	.....	2,500
	Graham, Samuel T. H.	M.A., Tor.	Math. & Phys., Phys. Cul.		1919	3½	....	.....	2,300	.....
	Harris, Mary A.	B.A., McM.	Mods. and Hist.		1918	8½	½	.....	.....	2,100
	Cruickshank, Libbie		Com.		1913	15½	5	.....	.....	2,100
	Gordon, Mary M.		Phys. Cul.		1918	5½	3½	.....	.....	1,800
	Nichol, Christine B.		Art, Phys. Cul.		1919	5	....	.....	.....	1,800
	Winhold, Edward P.		Phys. Cul. (Int.)		1920	3	1	.....	2,000	.....
	Kenyon, Grace	B.A., McM.	Eng. & Hist. (Int.), Class.		1920	2½	3	.....	.....	1,800
	Southcombe, William J. S.	B.A., Tor.	Class., Phys. Cul.		1920	5½	....	.....	2,300	.....
	Oaks, Anna M.	B.A., Tor.	Phys.Cul (Int.), Mods, Hist.		1921	2½	....	.....	.....	1,800
	Young, Ralph H.	B.A., Queen's	Science (Int.)	Phys. Cul.	1921	8	3	.....	2,300	.....
	Heather, Ruth B.		Com.	Phys. Cul.	1921	5½	....	.....	.....	1,800
Seaforth	Ross, John F.	M.A., Tor.	Math. & Phys., Phys. Cul.		1913	7½	2½	2,800	.....	.....
	Hazen, Arthur C.	M.A., Tor.	Science (Int.)	Phys. Cul.	1915	5½	3½	.....	2,300	.....
	MacPherson, Pearle	B.A., Queen's	Classics		1918	6½	....	.....	.....	1,750
	Laing, Maybelle M.	B.A., Queen's	Mods. and Hist. (Int.)	Art	1920	6½	3	.....	.....	1,700
	Craig, Beatrice M. (Int.)	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1920	½	....	.....	.....	1,300
	Hartry, Norma I. (Int.)			Phys. Cul., Art	1919	2	4	.....	.....	1,200
	Best, Leila D. (Int.)			Phys. Cul.	1920	1	6	.....	.....	1,125
Smith's Falls	Burns, Charles J.	B.A., Queen's	Classics		1912	11½	....	2,300	.....	.....
	McWhorter, Mary A. V.	B.A., Tor.	Mods. and Hist.		1916	11	....	.....	.....	1,600
	Keegan, Joseph D.		Com.		1919	15	13	.....	1,800	.....
	Allin, Crawford S. (Int.)	B.A., Qns., M.A., Col.	Math. & Phys.		1920	1	2½	.....	2,100	.....
	Taggart, F. Doreene (Int.)	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1920	1½	....	.....	.....	1,500
	Sweeney, Agnes C.		Art (Int.)	Phys. Cul.	1920	15	3½	.....	.....	1,600
	Thomas, Isabel M. (Int.)	B.A., Br. Col.	Phys. Cul.		1920	½	....	.....	.....	1,400
	Ferguson, William I.		(Man. Train. Instr.)	Phys. Cul.	1912	9½	12	.....	1,700	.....
	Miller, Beulah		(Household Sci. Instr.)		1919	4½	8	.....	.....	1,100
	(Teacher to be appointed)				....	....	....	.....	.....	.....
Stratford	Mayberry, Charles A.	B.A., LL.B., Tor.	Classics		1891	37	2	3,000	.....	.....
	Malcolm, George	B.A., Queen's	Eng. and Hist.		1890	36	6	.....	2,350	.....
	Sprung, Whitfield L.	B.A., Tor.	Math. and Phys.		1908	17	5	.....	2,600	.....
	McQueen, Rose J.	B.A., Tor.	Eng. and Hist.		1912	13	1	.....	.....	2,250
	McMillan, William J.	B.A., Tor.	Science		1912	11½	5	.....	2,300	.....
	Davis, Irene P.	B.A., Tor.	Art	Phys. Cul.	1916	6½	3	.....	.....	1,600
	Stuart, Muriel A.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	4	....	.....	.....	1,800
	Taylor, Daisy E.				1914	15	4½	.....	.....	1,600
	Harper, Gertrude A.	B.A., Tor.	Com. (Int.)	Phys. Cul.	1920	2½	3½	.....	.....	1,600
	Sillers, Annie M. (Int.)	B.A., Queen's		Phys. Cul.	1919	1½	9	.....	.....	1,500
	White, Harry S.			Phys. Cul.	1920	13½	2	.....	2,200	.....

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

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								Principal	Male Assistants	Female Assistants
								$	$	$
Stratford—*Continued*..	Fuller, David S.	M.A., Tor.	Math. and Phys....(Int.)	Phys. Cul.	1920	⅝	....	.....	2,000	.....
	Almas, Anna F.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	4⅜	....	.....	.....	1,500
	Tench, Franklin J.	.....	Man. Train.	.....	1919	5½	6	.....	2,000	.....
	Sinclair, Muriel G. ...(Int.)	B.A., Tor.	Household Science	Phys. Cul.	1919	1½	....	.....	.....	1,300
Strathroy	Sexton, James H.	M.A., Queen's	Science	.....	1914	24	9	2,500	.....	.....
	King, Reginald H. ....(Int.)	B.A., McM.	Classics, Phys. Cul.	.....	1920	1½	....	.....	2,300	.....
	Henry, Elizabeth C.	B.A., Queen's	Fr. & Ger., Mods. & Hist.	.....	1913	11½	13	.....	.....	1,450
	Murray, Olive H.	.....	Art .....(Int.)	Phys. Cul.	1920	6½	1	.....	.....	1,500
	Found, Ada C.	B.A., McM.	Mods. & Hist. (Int.), Com.	Phys. Cul.	1919	4	1	.....	.....	1,400
	McKillop, Archie F.	B.A., Queen's	Phys. Cul., (Int.), Math..	.....	1919	3	....	.....	2,400	.....
Toronto, Harbord St.	Hagarty, Edward W.	M.A., Tor.	Classics	.....	1892	37	....	4,375	.....	.....
	Glassey, David A.	B.A., Tor.	Classics	.....	1906	26½	....	.....	3,375	.....
	Wightman, Robert	B.A., Tor.	Math.	.....	1908	23	....	.....	3,375	.....
	Ivey, Thomas J.	M.A., Tor.	Science	.....	1909	24½	....	.....	3,375	.....
	Irwin, Herbert W.	B.A., Tor.	Mods. and Hist.	.....	1915	19	....	.....	3,375	.....
	Sealey, Ethel M.	B.A., Tor.	Ph. Cl. (Int.), Mods. & His.	.....	1918	19	1	.....	.....	3,125
	Carlyle, John A.	B.A.,Tor., M.A.,Harv.	Eng. and Hist.	Phys. Cul.	1911	11	2	.....	2,875	.....
	Robinson, Frances A.	B.A., Tor., M.A., Col..	Phy. Cl., Eng. & H.	.....	1915	9½	2½	.....	.....	2,625
	Fraser, Charles G. (Jr.)	M.A., Tor.	Science	.....	1910	10½	....	.....	2,875	.....
	Young, Edmund T.	.....	.....	.....	1911	14	20	.....	3,150	.....
	Hawkins, Maud M.	B.A., Tor.	Eng., Hist., Fr. & Ger.	.....	1911	20	....	.....	.....	3,000
	Rochat, Mrs. Norma D.	M.A., Tor.	Mods. and Hist.	Phys. Cul.	1914	11	....	.....	.....	2,750
	Knight, Carrie M.	M.A., Tor.	Class., Eng. & Hist.	Phys. Cul.	1913	11½	....	.....	.....	2,750
	Adams, John H.	B.A., Tor.	Phys. Cul.	.....	1913	12½	....	.....	2,875	.....

	Corbett, L. Hamilton	M.A., Tor.	Mods. and Hist.		1913	7½	....	.....	2,750	.....
	Griffin, Selwyn P.	B.A., Tor.	.....	.....	1919	2	....	.....	2,500	.....
	Asbury, Frank C.	M.A., Tor.	Math. and Phys.	.....	1919	4	....	.....	2,125	.....
	MacGregor, Mrs. Jeanette E.	.....	Phys. Cul., Art, Com.	.....	1917	11	4	.....	.....	2,375
	Hill, Kenneth S. ....(Int.)	B.A., Queen's	.....	.....	1920	1½	....	.....	1,975	.....
	Helmkay, Iva Beatrice (Int.)	B.A., Queen's	Math.	.....	1920	1	....	.....	.....	1,875
Toronto, Humberside.	Colbeck, Franklin C.	B.A., Vic.	Classics, Eng.	.....	1894	34	1½	4,375	.....	.....
	Gourlay, Richard	B.A., Tor.	Classics, Math.	.....	1893	34	....	.....	3,375	.....
	Charles, Henrietta	B.A., Tor.	Eng., Fr. and Ger.	.....	1901	34	....	.....	.....	3,375
	Johnston, Frederick J.	M.A., Tor.	Science	.....	1904	23	3	.....	3,375	.....
	Bennett, John S.	B.A., Tor.	Classics	.....	1909	12½	6	.....	3,125	.....
	Jermyn, Percy T.	M.A., Tor.	Eng. and Hist.	.....	1915	20	2	.....	3,375	.....
	Stewart, Kate L.	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1911	13	½	.....	.....	2,875
	Patterson, Arnott M.	M.A., Queen's	Science	.....	1913	12½	½	.....	3,000	.....
	Clarke, Bruce W.	B.A., McM.	Sci.(Int.),Ph. C., Math.&P.	.....	1913	9½	....	.....	2,750	.....
	Barr, Annie E.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1913	8½	....	.....	.....	2,625
	Colbeck, Wilhelmina L.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1913	8½	....	.....	.....	2,625
	McQuarrie, Ernest C.	B.A., Tor.	Phys. Cul.	.....	1915	8½	....	.....	2,500	.....
	Belcher, Norah T.	B.A., Tor.	Phys. Cul., Classics	.....	1918	8½	....	.....	.....	2,375
	Preston, Gardiner A.	B.A., Tor.	Math. & Phys., Phys. Cul.	.....	1920	2½	....	.....	1,975	.....
	Hatch, Salem B.	.....	Art, Com.	.....	1909	16	8	.....	3,125	.....
	Evans, William A.	.....	.....	.....	1904	16½	20	.....	3,125	.....
	Ward, Ada L.	M.A., Tor.	Mods. and Hist.	Phys. Cul.	1921	12	3	.....	.....	2,075
	Nicholson, Elvira E.	M.A., Tor.	Mods and Hist., Art.	Phys. Cul.	1921	6	....	.....	.....	2,075
	McLellan, Robert F....(Int.)	B.A., Tor.	Phys. Cul.	.....	1921	1½	....	.....	1,875	.....
Toronto, Jarvis	Jeffries, John	B.A., Tor.	Eng., Hist., Fr. & Ger.	.....	1907	33	1	3,875	.....	.....
	Jennings, William A.	B.A., Tor.	Science	.....	1907	14½	....	.....	3,250	.....
	Tapscott, Harry B.	M.A., McM. & Harv.	Fr. and Ger.	.....	1912	16	6½	.....	3,375	.....
	Barnes, Charles L.	B.A., Tor.	Classics	.....	1913	18	4½	.....	3,375	.....
	Hardy, Edwin A.	B.A., D.Pæd., Tor.	Eng., Fr. and Ger.	.....	1910	30	....	.....	3,125	.....
	Sinclair, John	B.A., Tor.	Math.	.....	1917	32	8	.....	3,375	.....
	Thomas, Janie	M.A., Tor.	Eng. and Hist.	.....	1882	38½	1	.....	.....	3,125
	O'Connell, Marguerite E.	B.A., Queen's	E. & H. (Int.), Ph.C.,F.&G	.....	1908	12½	3	.....	.....	3,125
	Barnes, Charles H.	.....	Phys. Cul.	.....	1910	10½	16	.....	3,125	.....
	Durie, Helen F.	B.A., Tor., M.A., Col.	Phys. Cul.	.....	1913	7½	....	.....	.....	2,750
	Allin, Arthur E.	M.A., Tor.	Art	.....	1913	7½	....	.....	2,625	.....
	McKellar, John	B.A., Tor.	Math. and Phys.	.....	1919	4	....	.....	2,000	.....
	Moorhouse, Walter ...(Int.)	B.A., Tor.	.....	Art, Phys. Cul.	1919	2½	10	.....	2,125	.....
	Feasby, William J.	B.A., Queen's	Mods. & Hist., Fr. & Ger.	.....	1919	12½	5	.....	2,125	.....
	St. John, Helen B. ...(Int.)	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1919	1½	....	.....	.....	1,875
	Smithson, Laura A	M.A., Tor.	Classics	.....	1920	8½	....	.....	.....	2,125
	McCamus, Marion K....(Int.)	B.A., Tor.	.....	Art, Phys. Cul	1921	....	7	.....	.....	1,875

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

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								Principal	Male Assistants	Female Assistants
								$	$	$
Toronto, Malvern Ave.	Lehmann, Carl A. K.	B.A., Tor.	Science		1910	25	2	4,375	.....	.....
	Graham, Louis H.	M.A., Tor.	Science		1912	21	5½	.....	3,375	.....
	Horton, Charles W.	B.A., Queen's	Art, Eng. and Hist.		1911	27	7	.....	3,375	.....
	Lingwood, Frederick H.	M.A.,Tri.,D.Pæd.,Qns.	Classics		1910	28	....	.....	3,225	.....
	Barr, Lydia A.	B.A., Tor.	Mods. and Hist.		1908	28	9	.....	.....	3,162
	Dafoe, Helen I.	B.A., Tor., M.A., Col.	Ph. Cl. (Int.), Mod. & His.		1914	7½	....	.....	.....	2,725
	Clarke, Lorne H.	B.A., McM.	Phys. Cul., Math. & Phys.		1914	6½	....	.....	2,600	.....
	Symons, Helen F.	B.A., Tor.	Eng. & Hist., Phys. Cul.		1918	5½	....	.....	.....	2,100
	Hisey, Abraham	B.A., McM.	Phys. Cul. (Int.), Science		1917	5½	....	.....	2,100	.....
	Rogers, William H.	M.A., Trin.	Math.		1920	18½	2	.....	3,225	.....
	Keeling, Wilford Lorne	B.A., Tor.	Phys. Cul.	(Int.)	1920	3½	½	.....	2,075	.....
	Ingham, Harriet	B.A., Tor.	E. & H., M. & H., Ph. Cul.		1921	5½	....	.....	.....	2,075
Toronto, Oakwood	Gray, Robert A.	B.A., Tor.	Math.		1910	36	....	4,375	.....	.....
	Clarke, Frederick H.	B.A., Tor.	Eng. & Hist., Fr. & Ger.		1908	25	....	.....	3,375	.....
	Kennedy, Thomas	M.A., Queen's	Math.		1908	21	2¾	.....	3,375	.....
	Jewett, Albert E.	B.A., Queen's	Science		1908	33	3½	.....	3,375	.....
	Dunkley, Albert W.	M.A., Queen's	Classics		1919	18	....	.....	3,350	.....
	Brown, Harry W.	B.A., Tor.	Eng., Hist., Fr. & Ger.		1915	26	....	.....	3,350	.....
	McDonald, Evelyn	M.A., Tor.	Mods. & His., Ph.C. (Int.)		1913	8½	....	.....	.....	2,600
	McQuarrie, George B.	M.A., Tor.	Class., Phys. Cul.	(Int.)	1919	8	....	.....	2,725	.....
	Hanna, W. Edward	B.A., Queen's	Mods. & His., Phys. Cul.		1914	7½	5	.....	2,850	.....
	Barton, Ambrose R.	B.A., Tor.	Art, Phys. Cul.	(Int.)	1914	6½	2	.....	2,600	.....
	Jenkins, James T.	B.A., Tor.	Ph. Cl. (Int.), Math. & Phys.		1919	2½	4	.....	2,600	.....
	Kirby, Luther H.	B.A., Tor.	Science		1919	3½	....	.....	2,475	.....
	Quail, May F.	M.A., Tor.	Mods. & H. (Int.) Fr. & G.		1915	7½	....	.....	.....	2,600

	Bell, Edwin T.	B.A., McM.	Science	Ag.&Hor.,Ph.C.	1915	6½	....	.....	2,475	.....
	Mowat, John H.	B.A., Queen's	Eng. & H., Ph. Cl. (Int.)		1916	5	2	.....	2,350	.....
	Evans, Rennie Mabel	B.A., Tor.	Math. & P. Art, Com. (Int.)		1916	5	....	.....	.....	2,225
	Phillips, Fitzallan ....(Int.)	M.A., Tor.	Math. and Phys.	Phys. Cul.	1918	2½	1	.....	1,975	.....
	Gilray, Roberta G.	B.A., Tor.	Phys. Cul. .....(Int.)		1918	10½	....	.....	.....	2,225
	Reade, Jessie B. .....(Int.)	B.A., Tor.	Class., Phys. Cul.		1919	3½	....	.....	.....	2,100
	Buchanan, Ruth C. ....(Int.)	B.A., Queen's	Fr. and Ger.	Phys. Cul.	1920	½	....	.....	.....	1,975
	Ewing, Charles M.	M.A., Edin.	Class. .....(Int.)	Phys. Cul.	1920	2½	....	.....	2,175	.....
	Austin, Margery I.....(Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1920	3½	....	.....	.....	2,100
	Jackson, William A. ..(Int.)	B.A., Tor.	Math. & Phys., Phys. Cul.		1920	½	2	.....	2,075	.....
	Nethercott, James P. S. (Int.)	B.A., Tor.			1920	1½	2	.....	2,175	.....
	Horning, John H. ....(Int.)	B.A., Tor.	Math. and Phys.	Phys. Cul.	1920	½	....	.....	2,175	.....
	Shortill, Robert N.		Manual Training		1912	8½	26	.....	2,975	.....
	Findlay, Edith C. .....(Int.)	B.A., Tor.	Ho. Sci.	Phys. Cul.	1918	2½	½	.....	.....	1,975
Toronto, Parkdale	Smith, Gilbert A.	B.A., Tor.	Science		1889	39	4	4,375	.....	.....
	Spence, Nellie	B.A., Tor.	Eng. and Classics		1889	32	1	.....	.....	3,375
	Hillock, Julia S.	B.A., Tor.	Fr. and Ger.		1900	27	....	.....	.....	3,375
	Cosens, Absalom	M.A., Ph.D., Tor.	Science		1904	24	2	.....	3,375	.....
	Mills, John H.	M.A., Queen's	Classics		1906	30	1	.....	3,375	.....
	Keith, George W.	B.A., Tor.	Math.		1912	22	....	.....	3,375	.....
	Dugit, Rosalie A.	M.A., Tor.	Phys. Cul. (Int.), Classics		1913	12½	....	.....	.....	2,875
	Skirrow, William A.	M.A., Queen's	Math.		1917	10½	....	.....	2,375	.....
	Reid, Thos. E.	B.A., Tor.	Phys. Cul. .....(Int.)		1905	16	8½	.....	3,125	.....
	Darroch, William F.		Phys. Cul. .....(Int.)		1910	11	16	.....	3,125	.....
	Hall, Marjorie S.	B.A., Tor.	Ph.Cul.(Int.), Mods.&Hist.		1920	2½	....	.....	.....	1,875
	Doherty, John C.	B.A., McM.	Science	Phys. Cul.	1919	10	....	.....	2,125	.....
	Edwards, Grace	M.A., Tor.	Mods. and Hist. ...(Int.)	Phys. Cul.	1918	12½	....	.....	.....	2,250
	Sanderson, Oliver N.	B.A., Tor.			1920	5½	....	.....	2,125	.....
	Smith, W. Wray	B.A., McM.	Phys. Cul. .....(Int.)		1919	4½	4½	.....	2,125	.....
	O'Neill, Albert E.	B.A., Queen's	Eng. and Hist.		1919	5½	....	.....	2,125	.....
	Delmage, Emelyn E.	B.A., McM.	Math., Art	Phys. Cul.	1919	13½	....	.....	.....	2,125
	Ferguson, Elizabeth D.		Art		1919	2½	5	.....	.....	2,000
	White, Lloyd J.			Phys. Cul.	1920	1½	....	.....	2,075	.....
Toronto, Riverdale	Michell, William C.	B.A., Tor.	Classics		1919	26	....	4,375	.....	.....
	Moore, James R.	M.A., Queen's	Science		1907	22	½	.....	3,375	.....
	Wren, John S.	B.A., Tor.	Math.		1907	22	....	.....	3,375	.....
	Willson, Alice M.	B.A., Tor.	Fr. and Ger.		1908	17	4	.....	.....	3,375
	Watson, Erwin H. A.	B.A., Tor.	Mods. and Hist.		1919	18	3	.....	3,375	.....
	McKinley, James M.	B.A., Tor.	Classics		1919	21	....	.....	3,375	.....
	Kidd, Truman W.	B.A., Queen's	Art		1909	15½	6	.....	3,125	.....
	Dunnett, Alfred H.	B.A., Queen's	Phys. Cul.		1911	9½	11½	.....	3,000	.....
	Nichol, S. Winnifred	M.A., Tor.	Phys. Cul., Mods. & Hist.		1914	10½	....	.....	.....	2,625

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								Principal	Male Assistants	Female Assistants
								$	$	$
Toronto. Riverdale *Continued*..	Flock, F. Arthur	B.A., Tor.	Science		1915	11	2½	.....	2,625	.....
	Goring, Ralph B.	B.A., Tor.	Math.&Phys. (Int.),Ph.Cul		1915	6½	2½	.....	2,500	.....
	Lewis, Nora	B.A., Tor.	Classics	Phys. Cul.	1916	7½	....	.....	.....	2,375
	DeGuerre, Laura B.	B.A., Tor.	M.&H., Ph.Cl. (Int.),Fr.&G		1919	6½	....	.....	.....	2,125
	Campbell, Lillian M.	B.A., Tor.	Mods. and Hist.		1919	5½	....	.....	.....	2,000
	MacLeod, M. Augusta	B.A., Queen's	Science	Phys. Cul.	1919	6½	....	.....	.....	2,125
	St. John, Katherine J..(Int.)	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920		....	.....	.....	1,875
	Harper, Charles .....(Int.)	B.A., Queen's	Math. and Phys.	Phys. Cul.	1921		3½	.....	2,075	.....
	Faw, Edward		Manual Training		1914	6½	21	.....	2,750	.....
	Smith, H. Kathleen ..(Int.)	B.A., Tor.	Household Sci.		1919	1½	....	.....	.....	1,875
Vankleek Hill	Rand, Wilfred E.	B.A., Tor.	Math.	Phys. Cul.	1920	28	1	2,600	.....	.....
	Mielhausen, Albert J.	B.A., Queen's		Phys. Cul.	1920	2	3	.....	2,300	.....
	Mason, E. Winnifred (Int.)	B.A., Tor.	Mods. & Hist., Phys. Cul.		1920	2½	....	.....	.....	1,700
	McDonald, Kath'ine M. (Int.)	M.A., Tor.	Class.	Art	1920	2	5	.....	.....	1,800
	Hawkins, W. M. ....(Temp.)				1921	....	5	.....	2,000	.....
	Hall, Margaret M. S.	B.A., Queen's	Art .....(Int.)	Phys. Cul.	1921	10½	5	.....	.....	2,000
Windsor	Lowe, William D.	M.A., Queen's	Eng. & Hist., (Int.), Class		1908	12½	....	3,600	.....	.....
	Brunt, Robert A.	B.A., Tor.	Science		1905	18	1	.....	2,800	.....
	Reid, Robert	B.A., Tor.	Eng., Hist., Fr. & Ger		1909	27	4	.....	2,800	.....
	Cleary, Norah	B.A., Tor.			1900	19½	....	.....	.....	2,400
	Cunningham, Evangeline	B.A., Tor.	Phys. Cul.		1909	16	....	.....	.....	2,600
	Srigley, Edgar C.		Com.		1911	26	5	.....	2,600	.....
	Thompson, Peter M.	M.A., Queen's	Science		1913	20½	5	.....	2,800	.....
	Belton, Mildred	B.A., Tor.	Phys. Cul. .....(Int.)		1915	6½	....	.....	.....	2,600

Windsor—*Con.*	O'Donoghue, Mary H.	M.A., Tor.	Phys. Cul., Mods. & Hist.		1915	12	....	.....	.....	2,600
	Wheelton, Leonard	B.A., Queen's	Art		1915	12½	2	.....	2,800	.....
	Campbell, George S.	B.A., Tor.	Math. and Phys.	Phys. Cul.	1916	6½	2	.....	2,800	.....
	Downey, William H.	.....	Phys. Cul. (Int.)	.....	1916	4½	18	.....	2,600	.....
	Carson, William L.	.....	Man. Train. (Int.)	.....	1918	2½	6	.....	2,600	.....
	Doherty, Mabel O.	.....	Art (Int.), Ph. Cl., Com.		1918	18	2	.....	.....	2,400
	Firby, Mrs. Emma Ford	.....	Com.	Phys. Cul.	1919	11½	4	.....	.....	2,400
	Hooper, Arthur G.	M.A., Tor.	Classics	.....	1919	7½	2½	.....	2,800	.....
	Foerster, Arthur J.	M.A., Tor.	Math. and Phys.	.....	1919	1½	....	.....	2,600	.....
	Whitton, Fred A.	B.A., Queen's	Mods. & His. (Int.), Fr. & Ger.	.....	1920	7½	....	.....	2,700	.....
	McMaster, Maude H.	B.A., Queen's	Eng. & Hist., Ph. Cl. (Int.)	.....	1920	3½	7½	.....	.....	2,500
	Philp, Florence H.	.....	.....	Phys. Cul.	1920	5½	....	.....	.....	1,700
	Sirrs, Elmer J. (Int.)	.....	(Man. Tr. Instr.), Ph. Cl.	.....	1919	1½	2½	.....	2,600	.....
	Mowbray, Tena P. (Int.)	.....	(Household Sci. Instr.)	.....	1920	2	3	.....	.....	1,600
Woodstock	Salter, Wesley J.	B.A., Tor.	Classics	.....	1907	13½	....	3,000	.....	.....
	Hodgins, Ekron P.	B.A., Tor.	Science	Phys. Cul.	1919	7½	....	.....	2,400	.....
	Lawr, John M.	B.A., Queen's	Math.	Phys. Cul.	1917	9½	3	.....	2,400	.....
	Trace, Cephas M.	M.A., Queen's	Com., Art (Int.)	Phys. Cul.	1919	4½	1	.....	2,200	.....
	Bole, Cecil L. (Int.)	B.A., Tor.	Art	Phys. Cul.	1920	1	4½	.....	1,600	.....
	Entwistle, Merton L.	.....	Phys. Cul.	.....	1919	3½	....	.....	1,600	.....
	Dengate, E. Winnifred	B.A., McM.	Mods. and Hist.	Phys. Cul.	1918	10½	1	.....	.....	1,700
	Millar, Annie B.	B.A., McM.	Eng. and Hist.	Art	1919	3½	5	.....	.....	1,700
	Hooker, Ida Aletha (Int.)	B.A., McM.	Mods. and Hist.	Phys. Cul.	1919	1½	....	.....	.....	1,600
	Robinson, Mary A.	.....	Phys. Cul. (Int.)	.....	1910	10	10	.....	.....	1,600
	Murray, Annie D. (Int.)	B.A., Tor.	Phys. Cul.	.....	1918	2½	....	.....	.....	1,400
	MacKay, Emma L.	.....	.....	Phys. Cul., Com.	1910	10	3½	.....	.....	1,300
	Dent, Beatrice	.....	.....	.....	1918	2½	1½	.....	.....	1,150
	Mercer, John S.	.....	Manual Training	.....	1905	15	6½	.....	1,700	.....
	White, Lila K. G.	.....	(Ho. Sci. Instr.), P. Cl. (Int.)	.....	1911	9	4½	.....	.....	1,300
High Schools:										
Alexandria	MacKay, Donald	M.A., Tor.	Classics	.....	1896	31	2½	2,250	.....	.....
	Ostrom, Ethel L.	B.A., Queen's	Art (Int.)	.....	1916	9	....	.....	.....	1,550
	Fraser, Sadie M. (Int.)	B.A., Queen's	.....	.....	1920	1½	....	.....	.....	1,400
	Bouchard, Mary A. C. (Int.)	B.A., Queen's	Mods. and Hist.	.....	1919	1½	....	.....	.....	1,350
Alliston	Davidson, Hugh	B.A., Tor.	.....	Phys. Cul.	1909	34	2	1,800	.....	.....
	McArthur, Annie M.	B.A., Queen's	Fr. and Ger. (Int.)	Phys. Cul.	1914	9	½	.....	.....	1,500
	Totten, Olive (Temp.)	.....	.....	.....	1921	....	1	.....	.....	1,400
Almonte	Henry, Thomas McK.	B.A., Tor.	Math.	.....	1920	36½	4	2,400	.....	.....
	Matthews, Jessie E.	B.A., Qn's, M.A., Tor.	.....	Phys. Cul.	1908	12½	3	.....	.....	2,000

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Almonte—*Con.*	Chisholm, Mrs. Jessie C. (Int.)	B.A., Queen's	Eng., Hist., Fr. and Ger.		1919	1½	....	.....	.....	1,300
	Dexter, Joseph H. (Temp.)				1920	½	....	.....	2,000	.....
Amherstburg	Overholt, B. Percy		Phys. Cul. (Int.)		1910	12½	4	2,000	.....	.....
	Wilson, Nora E. (Int.)		Phys. Cul.		1920	1	4	.....	.....	1,400
	Brigham, Olvetta		Art (Int.)	Phys. Cul.	1920	11½	4½	.....	.....	1,400
Arnprior	Ross, Alexander, H. D.	M.A., Queen's	Math., Science		1919	19½	....	2,500	.....	.....
	Stothers, Minerva E.	B.A., Queen's	Art		1916	12½	....	.....	.....	1,625
	Graham, Annie (Int.)	B.A., Queen's			1919	1½	1	.....	.....	1,500
	Cole, Gertrude M. (Int.)	B.A., Western		Phys. Cul.	1920	½	2	.....	.....	1,400
	Fleming, Earl A. (Int.)		Phys. Cul.		1920	½	3½	.....	1,700	.....
	Mitchell, Isabel C.			Phys. Cul.	1921	7	....	.....	.....	1,500
Arthur	McRitchie, Alexander R.	B.A., Tor.	Agr. and Hor. (Int.), Sci.		1913	23½	7	2,250	.....	.....
	Bell, M. F. Winifred			Phys. Cul., Art.	1919	11½	....	.....	.....	1,500
	Knowles, John H.	B.A., Queen's	Math. (Int.)	Phys. Cul.	1919	3	....	.....	1,750	.....
	Ryan, Gertrude	B.A., Tor.		Phys. Cul.	1920	4½	....	.....	.....	1,500
Athens	Burchell, James E.	B.A., Queen's		Agr. & Hor.	1915	12½	12	2,375	.....	.....
	Hartley, Floyd C. (Int.)	B.A., McM.	Math. & Phys., Phys. Cul		1920	1½	1	.....	1,800	.....
	Ferris, Kathleen B.	B.A., Tor.	Art	Phys. Cul.	1918	5½	....	.....	.....	1,600
	Guest, Lyla M. (Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1919	1½	....	.....	.....	1,500
	Sheridan, E. Mildred (Int.)	B.A., Queen's	Mods. & Hist.	Phys. Cul.	1920	1½	....	.....	.....	1,400
Aurora	Ewers, Charles F.	B.A., Queen's			1915	14	12	2,500	.....	.....
	Erb, William O. (Int.)	B.A., Queen's	Math. & Phys.	Phys. Cul.	1921	1½	....	.....	2,000	.....

	Stevens, Myrtle H.	B.A., Tor.		Phys. Cul.	1918	5½	1			1,700
	Morgan, Grace	B.A., Tor.	Art (Int.), Mods. & Hist.	Phys. Cul.	1918	2½	4			1,700
Avonmore	Leighton, Robert H.	B.A., Queen's			1919	13½	19	2,000		
	Pacey, Mabel I.		Phys. Cul.	Art	1914	6½	½			1,350
	Wilson, Muriel K.			Art	1919	2½	2½			1,100
Aylmer	Awde, Elgin O.	B.A., Queen's		Phys. Cul.	1917	10½	2	2,250		
	O'Neil, Jessie	B.A., Tor.	Phys. Cul. (Int.)		1919	2½				1,500
	Campbell, John J.			Phys. Cul.	1920	3			1,500	
	Chambers, Marj. A. C. (Int.)		Phys. Cul.		1921	1½	1½			1,400
Beamsville	Adams, John G.	B.A., Queen's	Agr. (Int.), Science	Farm Mech.	1919	5½		2,500		
	Long, John A. (Int.)	B.A., McM.	Math. and Phys.	Phys. Cul.	1920	½	2		1,800	
	Burton, Olive W. (Int.)	B.A., Tor.	Ho. Sci., Art		1920	½	2			1,200
	Gundry, Helen M.	B.A., Tor.	Classics	Phys. Cul., Art.	1920	15½				1,500
Belleville	MacLaurin, Peter C.	B.A., McM.	Science		1909	16		2,900		
	Stilwell, Ayrest L.	B.A., McM.	Phys. Cul.		1921	5½	2		2,300	
	Libby, Minnie F.	B.A., Vic.	Eng. & Hist., Fr. & Ger.		1910	25	4			1,800
	Milburn, Edward F.	M.A., Trin.			1870	50			1,750	
	Hitchon, Claire H.	M.A., McM.	Mods. & H. (Int.), Eng.&H		1913	10½				1,800
	Affleck, Archibald A.	B.A., McM.	Classics		1919	7½			2,100	
	Young, Madeline C.	B.A., McM.	Eng. and Hist.		1919	3½	2			1,700
	Vosper, Mrs. Margaret A. G.	B.A., Queen's	Phys. Cul. (Int.), Art.		1919	4½	1½			1,700
	Leuty, James H. S.		Phys. Cul.		1919	5½	1½		1,850	
	James, George M.	B.A., LL.B., Tor.		Art, Phys. Cul.	1920	9	15		2,000	
	Shorey, Percival M.	B.A., B.Sc., Queen's.		Agr., F.M., Ph.Cl	1920	4½			2,200	
	Fennell, Mary A. (Int.)	B.A., Tor.			1920	1½	½			1,800
	Merry, Nellie P.	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1920	3½				1,700
	McLeod, Lola	B.A., Queen's	(Ho. Sci. Instr.)	Phys. Cul.	1920	7				1,300
Bowmanville	Morrison, William J.	B.A., Tor.	Science	P. C., A. & H	1918	7½	5	2,700		
	Elliott, John	B.A., Queen's	Math., Eng.		1920	36	5		2,050	
	Smith, Isabel K.	B.A., Tor.	Art	Phys. Cul.	1913	13				1,400
	Edmonds, Ernest W. (Int.)	B.A., Tor.		Phys. Cul.	1920	½	½		1,800	
	Durnin, Vera B.		Phys. Cul.		1921	3	2			1,300
Bracebridge	Steer, Albert B.	B.A., Tor.			1920	12	1	2,500		
	Hood, Annie I. (Int.)	B.A., Tor.		Phys. Cul.	1919	1½				1,400
	Ferguson, Evalena	B.A., Queen's		Phys. Cul.	1920	2½				1,300
	Logan, H. Beatrice			Art	1919	3½				1,300
	Kirkness, David		(Phys. Training, Instr.)							
Bradford	Harrison, Charles W.	M.A., Vic.		Phys. Cul.	1919	29		1,600		
	Henry, Mamie E. (Int.)	B.A., Tor.		Art, Phys. Cul.	1920	1				1,200
	Curry, Jessie E.		Phys. Cul. (Int.)		1918	2½	1			1,000

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								Principal	Male Assistants	Female Assistants
								$	$	$
Brampton	Fenton, William J.	B.A., Tor.	Classics	.....	1891	30	½	2,500	.....	.....
	Halnan, Lemen R.	M.A., Trin.	Math.	.....	1905	17	3	.....	2,200	.....
	Percy, Herbert A.	.....	.....	.....	1914	12	2	.....	2,100	.....
	Hutchinson, May R.	.....	Phys. Cul. ..... (Int.)	Art	1910	17	6	.....	.....	1,800
	Hamilton, Margaret A.	B.A., Tor.	Mods. and Hist.	Phys. Cul. ...	1915	12	....	.....	.....	2,000
	Stewart, E. Grace	B.A., Queen's	.....	Phys. Cul., Art.	1919	3½	2	.....	.....	1,500
Brighton	Bellamy, Wesley	B.A., Vic.	.....	Art.....	1920	31	5½	2,000	.....	.....
	Hinds, Margaret J.	.....	.....	Phys. Cul.....	1920	10½	3½	.....	.....	1,500
	Farley, Hazel	B.A., Tor.	Art ..... (Int.)	.....	1920	2½	....	.....	.....	1,350
Burlington....	Smith, Daniel E.	B.A., Tor.	.....	A. & H., P. C.	1909	17	2	2,000	.....	.....
	Newham, Eveline J.... (Int.)	B.A., Tor.	Art	Phys. Cul.	1918	3½	....	.....	.....	1,400
	Haight, Annie ..... (Int.)	B.A., Queen's	.....	Phys. Cul.	1919	2	1	.....	.....	1,100
Caledonia	Hicks, Thomas J.	B.A., Queen's	.....	Phys. Cul. ...	1913	8½	11½	2,000	.....	.....
	Lawrence, Charles F.	B.A., Tor.	Math. and Phys.	Phys. Cul. ...	1915	5½	5½	.....	1,600	.....
	Spence, Frances M.... (Int.)	.....	Phys. Cul.	Art	1920	1½	3	.....	.....	1,300
Campbellford..	Moffat, Thomas E.	B.A., Queen's	.....	.....	1916	14	2	2,750	.....	.....
	O'Shaughnessy, Kathleen T..	B.A., Queen's	Phys. Cul. ..... (Int.)	.....	1919	4	1	.....	.....	1,500
	Hoey, Mrs. Beatrice T.	M.A., Tor.	Classics	Phys. Cul. ...	1920	2½	....	.....	.....	1,800
	Armstrong, Gladys W. (Int.)	B.A., Tor.	.....	Phys. Cul.	1920	½	....	.....	.....	1,500
	Moran, Harry F. ..... (Int.)	.....	.....	.....	1921	½	1½	.....	1,800	.....
Carleton Place	McNeely, Priscilla V. M. ...	M.A., Trin.	Science	.....	1913	11	1	2,100	.....	.....
	Henderson, Orville J.	.....	.....	Art, Phys. Cul..	1920	3	....	.....	1,500	.....
	Oatway, George A. .... (Int.)	B.A., Queen's	.....	Phys. Cul.	1920	½	2	.....	1,500	.....
	Armstrong, Emily .... (Int.)	B.A., Queen's	Phys. Cul.	Art	1920	1½	....	.....	.....	1,500

Cayuga	Skeele, James E.	B.A., Tor.			1897	28	....	1,900	.....	.....
	Kennedy, Anna	B.A., Tor.			1915	4½	....	.....	.....	1,650
	Smith, James C. (Int.)			Phys. Cul.	1920	1	⅓	.....	1,200	.....
	Hutchinson, Gladys M.		Phys. Cul.		1920	3½	2	.....	.....	1,200
Chatsworth	Preston, Thomas	B.A., B.Pæd., Tor.	Science	Phy. Cul., Agr.	1919	25½	2	1,800	.....	.....
	Webster, John G. (Int.)				1920	½	½	.....	1,500	.....
Chesley	Wilson, Jas. Jos.	B.A., Queen's			1920	4	7	2,500	.....	.....
	Evans, Margaret Edna	B.A., Tor.			1918	2½	1	.....	.....	1,600
	McCullough, Charl. S. (Int.)	B.A., Tor.	Science		1920	1½	....	.....	.....	1,600
	Millar, Margaret G. (Int.)	B.A., Tor.	Art		1920	4	4	.....	.....	1,700
Chesterville	O'Neill, Mary M.	B.A., Queen's	Phys. Cul. (Int.)		1920	4	½	2,000	.....	.....
	Eaton, Ethel C.			Art, Phys. Cul	1919	7½	3	.....	.....	1,400
	McNamara, Elizabeth			Art, Phys. Cul	1919	7½	....	.....	.....	1,200
Colborne	Jenkins, Robert S.	M.A., Tor.	Class., Fr.&Ger., Eng.&Hist.		1920	15	....	2,200	.....	.....
	Tickell, L. Josephine (Int.)	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	½	....	.....	.....	1,200
Cornwall	Caldwell, Alexander	B.A., Royal Dublin	Com.		1912	8½	....	2,300	.....	.....
	Smith, Lyman C.	B.A., Vic.	Classics, Eng. and Hist.		1912	42⅓	2	.....	2,000	.....
	Birchard, Alexander F.		Phys. Cul., Com., Art		1898	26	12	.....	1,900	.....
	Hendry, Earl D.	B.A., Queen's	Phys. Cul.		1916	5½	2	.....	1,750	.....
	Spencer, Watson G.	B.A., McM.	Math. & Phys. (Int.)	Phys. Cul.	1919	2	....	.....	1,900	.....
	Tudhope, Horace H. (Int.)	B.A., Queen's		Phys. Cul.	1919	1½	5	.....	1,600	.....
	Tobin, Lilly S.	B.A., Queen's	Mods. and Hist.	Phys. Cul.	1920	6½	3½	.....	.....	1,600
	Whelan, Frances J. (Int.)	B.A., Tor.		Phys. Cul.	1920	½	....	.....	.....	1,300
	MacDougal, Jean L. (Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1921	1½	....	.....	.....	1,600
Deseronto	Nesbitt, Mabel E.	B.A., Queen's	Phys. Cul. (Int.)		1921	8	1	2,000	.....	.....
	Stocker, Eva R.		Phys. Cul. (Int.)		1915	9½	4½	.....	.....	1,700
	Hewson, Chas. G. (Temp.)	B.A., Queen's			1921	.....	.....	.....	1,300	.....
Dundalk	Wright, David T.			Phys. Cul.	1911	14½	10	1,875	.....	.....
	McDermid, Ina E. (Int.)	B.A., Queen's		Art, Phys. Cul	1920	⅔	....	.....	.....	1,200
	Stanley, Lucille H. (Int.)	B.A., Tor.		Phys. Cul.	1920	½	....	.....	.....	1,300
Dundas	Howson, Bruce F.	B.A., Queen's	Math. and Phys.	Phys. Cul.	1919	11½	2	2,500	.....	.....
	Cowan, Jessie I.	B.A., Tor.	Art (Int.)	Phys. Cul.	1920	2½	1	.....	.....	1,600
	Hyde, Catherine I.	B.A., Tor.	Ho. Sci. (Int.), Ph. Cl.		1915	5½	5	.....	.....	1,800
	Burke, Charlotte A.	B.A., McM.	Com. (Int.)		1920	4½	1½	.....	.....	1,500
	Cawsey, Clare E. (Int.)	B.A., Tor.	Art		1921	3½	....	.....	.....	1,500

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								Principal	Male Assistants	Female Assistants
								$	$	$
Dunnville	Thompson, John F.	M.A., D.Pæd., Tor...	Classics	.....	1918	18½	1	2,500	.....	.....
	Stewart, James H.	B.A., Queen's	Art	Phys. Cul. ...	1918	6½	2	.....	2,200	.....
	Munro, Margaret K.	B.A., Tor.	Math.	Phys. Cul. ...	1920	9½	5½	.....	.....	1,700
	Ferguson, Muriel B.	.....	Art .....(Int.)	.....	1921	....	7	.....	.....	1,500
	Ziehr, Mathilde .....(Int.)	B.A., Tor.	.....	Art, Phys. Cul..	1921	½	....	.....	.....	1,400
Durham	Henderson, James G.	M.A., McM.	Math. and Phys.....(Int.)	Phys. Cul. ...	1920	3½	3	2,300	.....	.....
	Weir, Julia M.	B.A., Queen's	Art	.....	1915	8½	12	.....	.....	1,500
	Horne, Mrs. Laura E.	B.A., Tor.	.....	Art, Phys. Cul.	1918	4½	....	.....	.....	1,500
	MacDonald, Margt. G. (Int.)	B.A., Queen's	.....	Phys. Cul.	1920	½	....	.....	.....	1,200
Dutton	Elliott, Thomas W.	B.A., Tor.	Science	.....	1918	14½	11	2,000	.....	.....
	Gartlan, Elizabeth ....(Int.)	B.A., Tor.	.....	Art, Phys. Cul	1919	1½	....	.....	.....	1,300
	Castleman, Hilda V....(Int.)	B.A., Queen's	.....	Phys. Cul.	1919	1½	....	.....	.....	1,200
	Vrooman, Caroline L. (Int.)	B.A., West.	Math. and Phys.	Phys. Cul.	1920	½	....	.....	.....	1,400
Elora	Morden, Frances D.	B.A., Tor.	Phys. Cul.	.....	1919	14	2	1,800	.....	.....
	Keeler, Joan .....(Int.)	B.A., Tor.	Phys. Cul.	.....	1920	½	3	.....	.....	1,000
	Smyth, Alice C. .....(Int.)	.....	.....	.....	1920	1½	2	.....	.....	1,000
Essex	Durnin, Edward W.	B.A., Tor.	Phy. Cul. (Int.) Math. & Ph	.....	1919	6½	....	2,500	.....	.....
	DeCou, Nellie	B.A., Tor.	Fr. and Ger.....	Art, Phys. Cul	1918	16	2	.....	.....	1,500
	Arnold, Leita E.	B.A., Queen's	Phys. Cul. .....(Int.)	.....	1920	3½	....	.....	.....	1,300
	Chapman, Mrs. Retta M. ...	.....	.....	Phys. Cul.	1919	7½	....	.....	.....	1,300
	Beaman, Elsie K.	.....	Phys. Cul.	.....	1920	7½	....	.....	.....	1,300
	Smithendorf, Herbert F.	.....	.....	Phys. Cul., Agr.	1919	8½	4	.....	1,800	.....

Exeter	Wethey, Edmund J.	B.A., Trin., M.A., Tor	Math.		1919	20	1	2,200		
	Gregory, Stella L.				1919	13½	2			1,500
	McLaughlin, Verna J. (Int.)				1920	½	5			1,300
Fergus	Perry, Peter	M.A., Tor.	Classics		1908	44		1,850		
	Craw, Mrs. Ethel (Int.)	B.A., Tor.			1920	½				1,400
	Duncan, Muriel	B.A., Tor.		Phys. Cul.	1920	5½				1,800
	Gillespie, Mary A.	M.A., Tor.	Art (Int.)	Phys. Cul.	1920	7				1,400
	McDonald, Vivian C.			Art, Phys. Cul.	1920	5½				1,400
Flesherton	Haviland, Hugh J.	B.A., Tor.	Class.	Phys. Cul., Ag.	1920	20		2,000		
	Holmes, Margaret	B.A., Tor.			1914	6½	3			1,250
	Broad, Luella L.	B.A., Tor.		Art, Phys. Cul.	1920	6½				1,250
Forest	Williams, Albert	B.A., Queen's		Phys. Cul.	1906	16	5	2,200		
	Walker, Alexina A. C.		Art	Phys. Cul.	1918	6				1,400
	Foreman, Kathleen B.	B.A., Queen's			1919	2½	2			1,400
Fort Frances	Cooke, John A.	M.A., Queen's	Classics		1919	31	3	2,600		
	Cooke, Violet E. W.	B.A., Queen's		Art, Phys. Cul	1918	2½				1,850
	MacIntyre, Sada			Art, Com.	1919	8½	6			2,100
Gananoque	Smith, Thomas C.	M.A., Queen's	Science	Agr. & Hor.	1919	20½	4	2,300		
	Lewis, Elwood Roy (Int.)	B.A., Queen's		Phys. Cul.	1918	2½	3		1,700	
	Gillespie, Grace A.	B.A., Queen's		Phys. Cul.	1920	6	½			1,600
	Fleming, Lulu (Int.)	B.A., Queen's			1920	½				1,600
Georgetown	Ross, Ralph	B.A., B.Pæd., Tor.	Classics	Phys. Cul.	1914	33		2,500		
	Delmage, Edith R.	B.A., McM.	Math.	Phys. Cul.	1920	13	2			1,700
	Penson, Elizabeth	M.A., Queen's	Science		1920	9	1			1,800
	Davidson, Annie K. (Int.)	B.A., Tor.	Art	Phys. Cul.	1920	2				1,400
	Smith, Marion E.	B.A., Tor.	Phys. Cul.		1921	2				1,500
Glencoe	York, Charles G.	B.A., Queen's	Phys. Cul.		1920	6½	4	2,000		
	Steele, R. Katherine	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1918	2½				1,500
	Gillies, A. Marjorie	B.A., Tor.	Phys. Cul.		1919	2½				1,500
Gravenhurst	McNab, Finlay	B.A., Queen's		Phys. Cul.	1920	8½	7	2,100		
	Broughton, Clara E.			Art, Phys. Cul	1906	15½				1,200
	Burns, Jean (Int.)	B.A., Tor.	Phys. Cul.		1921					1,200
Grimsby	McVicar, Archibald	B.A., Tor.	Eng. and Hist.		1918	20	5½	1,800		
	Talbot, Constance M. (Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1920	1½				1,200
	Scott, Jean L. (Int.)				1920	½	4			1,200
	McGregor, Jean H.			Art	1920	5				1,200

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

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								Principal	Male Assistants	Female Assistants
								$	$	$
Hagersville ..	Lishman, Frederic R.	B.A., Queen's	.....	Phys. Cul., Art.	1917	8½	....	1,975	.....	.....
	Brain, A. Beatrice	B.A., Tor.	Art	Phys. Cul.	1917	9½	1	.....	.....	1,350
	Galbraith, Janet E. ...(Int.)	.....	.....	Phys. Cul.	1919	1½	3½	.....	.....	1,050
	Bayne, Mary G. .....(Int.)	.....	.....	.....	1920	1½	1½	.....	.....	1,200
Haileybury ...	Tuke, William H.	B.A., Queen's	Phys. Cul.	Agr. & Hor. ..	1919	15	....	3,250	.....	.....
	Summerby, Frederika	B.A., Queen's	.....	Art	1918	2½	3½	.....	.....	1,800
	Hall, F. Grace	B.A., Tor.	Mods. and Hist	Art, Phys. Cul	1919	5	1	.....	.....	1,800
	Kinnear, Jennie A.	B.A., Queen's	Math.	.....	1920	6	....	.....	.....	1,800
Harriston	Hobbs, Thomas	B.A., Tor.	Math.	Phys. Cul.	1911	18½	5½	2,400	.....	.....
	Tanton, John	B.A., Queen's	Scinece .....(Int.)	Ph.Cl., Art, Ag.	1920	6½	....	.....	2,000	.....
	Underwood, Mary L...(Int.)	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	½	....	.....	.....	1,500
	Donnelly, Mertis M. ..(Int.)	B.A., Tor.	.....	Phys. Cul.	1920	½	....	.....	.....	1,400
Hawkesbury .	Shales, Walter E.	M.A., Queen's	Science, Phys. Cul.	Agr. & Hor. ..	1919	6½	5	2,200	.....	.....
	Bryan, Laura M.	.....	.....	Art, Phys. Cul	1918	3½	2	.....	.....	1,200
	Parker, Olive E.....(Int.)	B.A., Tor.	.....	.....	1920	1½	3	.....	.....	1,200
Iroquois	Campbell, William A.	B.A., Queen's	Phys. Cul.	Art	1913	7½	....	2,000	.....	.....
	Mulloy, Lulu E.	.....	.....	.....	1911	13	3½	.....	.....	1,750
	Husband, Edith P.	B.A., Queen's	.....	Phys. Cul.	1918	4½	4	.....	.....	1,300
	Carman, Margaret E.	M.A., Tor.	Mods. and Hist.	.....	1920	8½	....	.....	.....	1,300
Kemptville ...	Medcof, James L.	B.A., Queen's	Science	Phys. Cul.	1915	5½	1	2,000	.....	.....
	Johnston, Katie B.	B.A., Tor.	Eng. and Hist	Phys. Cul.	1911	9½	4	.....	.....	1,500
	Johnston, Frances V.	B.A., Tor.	.....	Phys. Cul. ...	1913	7½	2	.....	.....	1,450
	MacLeod, E. Blanche	B.A., Queen's	.....	Art, Phys. Cul	1919	4½	....	.....	.....	1,250
	Percival, Lois Mary	B.A., Queen's	Art	.....	1918	3½	....	.....	.....	1,150

Kenora	Shannon, Samuel	B.A., Tor.			1920	13	3	3,500		
	Maclennan, C. Lillie	B.A., Queen's	Phys. Cul. (Int.)		1918	10½	1			1,800
	Lindsay, Bertie L.		Com. (Int.)		1918	6½	3			1,800
	Bridgman, Norma E... (Int.)	B.A., Queen's	Phys. Cul.	Art.	1920	1½	3			1,500
	Case, H. James		Phys. Cul. (Int.)		1921	14	13		2,000	
Kincardine	Nelson, Albert E.	B.A., Queen's			1916	12½	6	2,500		
	Bodkin, Gertrude L.... (Int.)	B.A., West.		Farm Mech.	1919	1	1			1,700
	Dobson, Viola J.	B.A., Tor.		Art, Phys. Cul	1919	5½				1,500
	Mitchell, Grace L.			Art, Phys. Cul	1919	7½				1,300
	Gilfillan, Viola	M.A., Tor.		Phys. Cul.	1920	6½				1,500
	Young, Douglas L.		(Phys. Cul. Instr.)		1921					
Leamington	Courtice, Samuel J.	B.A., Tor.	Phys. Cul., Math.		1917	17½	6	2,500		
	Campbell, George A.			Agr. & Hor.	1908	12½	12		2,125	
	Rice, Elsie M.		Art (Int.)	Phys. Cul.	1917	6½				1,500
	Runians, Minnie C.	B.A., Tor.	Phys. Cul. (Int.), Eng. & H.		1920	4	8			1,500
	Stevenson, Clara M.	B.A., Tor.	Eng. and Hist.		1920	2½				1,450
	Magee, Myrtle (Int.)			Phys. Cul.	1920	1	2½			1,250
Listowel	Archibald, Robert H.	B.A., Queen's		Phys. Cul.	1920	10½		2,500		
	Hay, Hazel F.	B.A., Tor.		Phys. Cul.	1916	4½				1,800
	Tatham, Beatrix M.		Phys. Cul. (Int.)		1920	5½	3			1,600
	Harris, Una M.	B.A., Queen's	Phys. Cul. (Int.)		1920	5				1,800
	Mitchell, Jessie A.	B.A., Tor.	Art (Int.)		1921	20	9			1,400
Lucan	Douglas, Adam C.	B.A., Queen's		Phys. Cul.	1920	8	2½	2,500		
	Sutherland, Donald A. (Int.)	B.A., Queen's		Phys. Cul.	1920	½	4½		1,700	
	Madigan, Ellen I.	B.A., Tor.		Art, Phys. Cul.	1920	3½				1,600
	Hood, Rita M. (Int.)	B.A., Tor.		Art, Phys. Cul.	1920	½	½			1,300
Madoc	Marcellus, J. Ernest	B.A., Queen's			1919	14	2	2,700		
	Chown, Elizabeth	B.A., Queen's	Fr. & Ger. (Int.), Phys. Cul.	Art.	1919	2½				1,600
	Graham, Gladys M. ... (Int.)	B.A., Queen's		Phys. Cul.	1919	1½				1,250
	Tierney, Olive		Art		1919	5½	3			1,500
Markdale	Morrison, Selkirk A.	B.A., Queen's	Eng. and Hist., Phys. Cul.		1919	18½	4	2,000		
	(Teacher to be appointed)									
Markham	Bell, James S.	B.A., Tor.		Phys. Cul.	1912	11½	2	2,500		
	Campbell, Stella K.		Phys. Cul.		1912	13½	1½			1,500
	Dixon, Fred W.			Art, Phys. Cul.	1918	3½			1,500	
	Williams, Evelyn G.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1919	2½				1,500

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								Principal	Male Assistants	Female Assistants
								$	$	$
Meaford.....	Dundas, Arthur A.	B.A., Tor.	.....	.....	1897	24	2	2,500	.....	.....
	Williams, Edna J.	B.A., Tor.	.....	Phys. Cul.	1912	13½	....	.....	.....	2,000
	Hildred, Edna L.	M.A., Tor.	Mods. and Hist.	.....	1920	2½	....	.....	.....	1,800
	Hammond, John E.	.....	Com.	Art	1906	14½	3	.....	1,500	.....
	Hall, Robinson A.....(Int.)	.....	.....	Phys. Cul. ...	1921	2	2	.....	1,500	.....
Midland	Glass, William Arthur	B.A., Tor.	.....	Phys. Cul.	1904	18½	....	2,700	.....	.....
	Boyle, Edna M.	B.A., Tor.	Math. and Phys.	Phys. Cul.	1915	5½	1	.....	.....	2,000
	Robins, John J. .....(Int.)	B.A., Tor.	.....	Phys. Cul. ..	1920	½	3	.....	2.000	.....
	Newton, Amy A.	B.A., Tor.	Mods. & Hist., Phys. Cul...	.....	1920	4½	....	.....	.....	1,500
	McNair, Alice A. .....(Int.)	B.A., Tor.	.....	Phys. Cul., Art	1920	1½	....	.....	.....	1,500
Milton	Hamilton, James A.	M.A., Tor.	Math., Phys. Cul.	.....	1920	13½	....	2,000	.....	.....
	Wilson, Lorenia M....(Int.)	B.A., Tor.	.....	Phys. Cul. ...	1920	½	....	.....	.....	1,300
	Toll, Charles E.....(Int.)	.....	Phys. Cul.	.....	1921	½	3	.....	1,600	.....
	Todd, Frainee .....(Temp.)	M.A., Tor.	.....	.....	1921	½	....	.....	.....	1,800
Mitchell	Wightman, Stanley	B.A., Queen's	.....	Phys. Cul.	1919	16½	2½	2,200	.....	.....
	Rutherford, Mary H.	B.A., Queen's	Science .....(Int.)	.....	1920	8½	....	.....	.....	1,800
	Galloway, J. Louise	B.A., Tor.	Mods. & Hist., Phys. Cul..	.....	1920	5½	....	.....	.....	1,400
	Rutherford, Wilhelmina D...	.....	Art .....(Int.)	.....	1920	8½	4	.....	.....	1,500
Morewood	Loucks, Horatio	B.A., Queen's	.....	.....	1902	18½	5	2,100	.....	.....
	MacPhail, Mary C. .(Temp.)	B.A., McM.	.....	Phys. Cul.	1920	½	3	.....	.....	1,800
Mount Forest	Speirs, Thomas E.	B.A., Tor.	Math. and Phys.	.....	1907	14½	2	2,500	.....	.....
	Fothergill, Ethel L.	.....	Art .....(Int.)	Phys. Cul.	1919	4½	1	.....	.....	1,150
	Foreman, Bessie E. ..(Int.)	M.A., Queen's	Classics	Phys. Cul. ...	1920	½	....	.....	.....	1,100
	Maus, Janet W. .....(Int.)	B.A., Queen's	.....	.....	1920	½	6	.....	.....	1,200

Newburgh ...	Andrews, Robert T.	B.A., Tor.	Classics	.....	1910	16½	14	1,600	.....	.....
	Switzer, Neva	.....	Art	.....	1921	4½	....	.....	.....	1,500
	Wilson, Caroline R..(Temp.)	.....	.....	.....	1920	½	2	.....	.....	1,200
Newcastle ...	McMahon, Frank O.	B.A., Tor.	.....	Phys. Cul.	1916	12½	6	1,550	.....	.....
	Holland, Kathleen M. .(Int.)	B.A., West.	.....	Phys. Cul.	1920	½	....	.....	.....	1,150
Newmarket ..	Davidson, John H.	M.A., B.Pæd., Tor....	Math.	Phys. Cul.	1917	18	5	2,500	.....	.....
	Hollingshead, John E.	.....	.....	.....	1884	36	2½	.....	1,750	.....
	Kidd, William L.	.....	.....	Phys. Cul.	1910	16	10	.....	2,000	.....
	Wickett, Laura E.	.....	Com.	Art	1909	11½	1	.....	.....	1,800
	Taylor, Annie M. A.	B.A., Tor.	Phys. Cul.	.....	1914	6½	....	.....	.....	1,650
	Haines, Ruth W.	.....	.....	Art, Phys. Cul.	1917	7½	....	.....	.....	1,400
	Kirkwood, Elizabeth M.....	.....	.....	Art, Phys. Cul.	1919	3	17	.....	.....	1,450
	Nealon, Matthew J. ..(Int.)	B.A., Tor.	Phys. Cul.	.....	1920	2	....	.....	2,000	.....
Niagara	Bale, Geo. S.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1914	20	....	1,900	.....	.....
	McCoig, Mary Alice...(Int.)	.....	.....	Art, Phys. Cul..	1920	5	3½	.....	.....	1,500
Niagara Falls South	Myer, Albert N.	M.A., Trin.	Math.	.....	1908	26½	....	2,800	.....	.....
	Porter, William A.	.....	.....	Agr.& Hor.,P.C.	1916	5½	2	.....	2,000	.....
	Johnston, E. Grace	B.A., Queen's	.....	Phys. Cul.....	1914	7½	2	.....	.....	1,900
	Campbell, Minnie M.	.....	Com., Art	.....	1919	9½	6	.....	.....	2,000
	Dawson, Margaret M.	.....	.....	Com.....	1907	13	2	.....	.....	1,900
	Vandersluys, Major C. H....	.....	(Phys. Cul. Instr.)	.....	1920	16	10	.....	.....	.....
	Gardner, Ruth V.	.....	(Household Sci. Instr.)...	.....	1913	7	....	.....	.....	.....
Norwood.....	Lawlor, Richard G.	B.A., Queen's	.....	P.C.,Agr. & Hor	1908	19½	8	2,100	.....	.....
	Sangster, Grace .....(Int.)	B.A., Queen's	.....	Art	1919	2	2	.....	.....	1,500
	Lawlor, Mrs. Emma S.	B.A., Queen's	Mods. and Hist. ....(Int.)	.....	1921	6½	3	.....	.....	1,500
Oakville	Wyndham, William B.	B.A., Tor.	Eng., Hist., Fr. & Ger.....	Agr.& Hor.,P.C.	1914	24	6½	2,500	.....	.....
	McVean, Kathleen P.	B.A., Tor.	.....	Phys. Cul., Art.	1920	3½	....	.....	.....	1,400
	Ribey, Florence E. ....(Int.)	B.A., Tor.	Class.	Phys. Cul.	1920	½	....	.....	.....	1,400
	Moir, Mary A.	.....	Com.	.....	1921	15½	....	.....	.....	1,400
Omemee	Murphy, Edith A.	B.A., Queen's	.....	Art.....	1919	7	....	1,600	.....	.....
	Corneil, Joy .....(Temp.)	.....	.....	.....	1920	½	1	.....	.....	1,100
Orangeville ..	Hackett, Edward	B.A., Dublin	.....	.....	1915	11½	....	2,500	.....	.....
	Strang, Grace M.	B.A., Tor.	Mods. and Hist.	.....	1907	14½	....	.....	.....	1,600
	Sinclair, Ella A.	B.A., Tor.	Classics	Phys. Cul.	1918	2½	....	.....	.....	1,600
	Cook, Marjorie .....(Int.)	B.A., Tor.	Science	.....	1919	1½	....	.....	.....	1,500
	Byfield, Gwendolyn C. (Int.)	B.A., Tor.	Phys. Cul.	.....	1919	3	½	.....	.....	1,300
	Moir, Isabella	.....	Com.	Art	1920	13½	8	.....	.....	1,800

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								Principal	Male Assistants	Female Assistants
								$	$	$
Oshawa.....	Althouse, John G.	M.A., Tor.	Classics, Phys. Cul.	.....	1920	7½	....	3,000	.....	.....
	Stevenson, Lewis	B.A., B.Sc., Vic.	Math., Science	.....	1902	28	3	.....	2,500	.....
	Ferguson, Arthur W.	B.A., Queen's	Phys. Cul. (Int.), Math..	.....	1920	4½	1	.....	2,300	.....
	Hamer, Lottie E.	B.A., Tor.	Mods. & Hist., Phys. Cul..	.....	1920	7	2½	.....	.....	1,700
	McBride, Sara M.	.....	Art .....(Int.)	Phys. Cul.	1920	16½	....	.....	.....	1,600
	Armstrong, Florence J.	.....	Phys. Cul. .....(Int.)	.....	1920	10	5	.....	.....	1,400
	Cummer, Elvina M.	.....	Com. .....(Int.)	.....	1920	15½	....	.....	.....	2,000
	Scott, Andrew R. .....(Int.)	B.A., Queen's	Math.	Phys. Cul.	1920	¾	....	.....	1,700	.....
	Campbell, Gladys G. ..(Int.)	.....	Com.	.....	1920	1	3	.....	.....	1,500
Paris	Bell, Walter N.	B.A., D.Pæd., Tor.....	Classics	Phys. Cul.....	1898	30	....	2,900	.....	.....
	Willson, H. Blanche	B.A., Tor.	Math.	Phys. Cul.....	1912	8½	1½	.....	.....	2,000
	Noonan, Aileen	M.A., Tor.	Mods. and Hist.	Phys. Cul.....	1919	4½	....	.....	.....	1,800
	Jamieson, Elmer .....(Int.)	B.A., McM.	Science	Phys. Cul.....	1920	½	2	.....	1,700	.....
	Mew, Mrs. Edna F.	.....	.....	Phys. Cul., Art.	1920	6½	4	.....	.....	1,600
Parkhill	Cooper, Alex. B.	B.A., Queen's	(Superv. Vocal Music)...	.....	1920	17½	8	2,300	.....	.....
	Campbell, Archibald D.	B.A., McM.	Phys. Cul. .....(Int.)	.....	1919	1½	½	.....	1,400	.....
	LeBoeuf, Emilie A....(Int.)	.....	Art	.....	1921	....	3	.....	.....	1,500
	MacDonald, Jessie H..(Int.)	B.A., Queen's	.....	Phys. Cul. ..	1921	1½	½	.....	.....	1,600
Parry Sound	Cameron, James M.	B.A., Tor.	Science .....(Int.)	Phys. Cul.	1919	5	1½	2,300	.....	.....
	Hale, Mary E. .....(Int.)	B.A., Queen's	.....	Phys. Cul.....	1920	2	....	.....	.....	1,300
	Jones, Gwendolyn B.	.....	Art .....(Int.)	Phys. Cul. ..	1919	4½	....	.....	.....	1,300
	Hall, Henry W.	.....	.....	.....	1921	4	....	.....	1,500	.....

Pembroke.....	Flach, Ulysses J.	M.A., Tor.	Math.		1913	32		2,640		
	Dunlop, Charles G.			Phys. Cul.	1918	10⅓	1		2,160	
	Dickey, M. Ada	B.A., Tor.	Mods. and Hist.		1914	18				2,160
	Rose, Marion H.		Fr. and Ger.		1911	25½	4			1,920
	Cowan, Euphemia J.	M.A., Tor.	Phys. Cul. (Int.)		1920	10½				2,000
	Rutledge, Evelyn M.		Art		1920	4½				1,600
	De la Mater, Magdalene		Phys. Cul.		1917	11½				1,380
Penetanguis'ne	Keefe, R. Daniel	B.A., Tor.			1907	18½		2,300		
	Sweet, Fred. G.		Com. (Int.)		1911	11	4½		1,800	
	Abel, Margaret H.			Art, Phys. Cul.	1921	11	2½			1,400
Petrolia.....	MacKichan, Peter	B.A., Queen's		Phys. Cul.	1920	6½	3	2,500		
	McPhail, Alexander C.	B.A., Queen's			1910	26½	9½		1,800	
	Jones, Rachel L. L.	M.A., Western	Phys. Cul.		1918	4½	1½			1,500
	Saunders, Lucy	B.A., West., M.A., Mich.	Art		1916	6½	4½			1,500
Plantagenet...	Vrooman, Agnes S.	M.A., West			1919	7½		1,700		
	Murtha, Ella T. (Int.)		Art	Phys. Cul.	1919	1½	2			1,450
	(Teacher to be appointed)									
Port Dover....	Ionson, Margaret A.	B.A., Queen's		Phys. Cul.	1918	5	11	1,700		
	Brand, Olive C. (Int.)				1920	½	3			1,350
Port Elgin....	Carter George W.* (Int.)	M.A., Tor.		Phys. Cul.	1920	1½	4	2,000		
	McLaren, Caroline E. (Int.)	B.A., Queen's	Science	Phys. Cul.	1920	½				1,400
	Brown, Marion H. (Int.)	B.A., Queen's		Phys. Cul.	1920	½				1,200
Port Hope ...	Evans, George E.	M.A., Tor.	Classics	Phys. Cul.	1919	7½		2,600		
	Copeland, George E.	M.A., Queen's	Agr., (Int.), Science	Phys. Cul., F.M.	1911	9½	3½		2,100	
	Tuer, Margaret		Art, Com.	Phys. Cul.	1910	14	5			1,500
	Quinlan, Frances M.	B.A., Tor.	Mods. and His.	Phys. Cul.	1919	3½	1½			1,400
	Hay, James A. M. (Int.)	B.A., McM.	Math. and Phys.	Phys. Cul.	1920	½			1,800	
Port Perry....	Follick, Thomas H.	M.A., Vic.	Science	F.M., Agr., Mus	1915	30½	2	1,850		
	Stone, George				1883	39	4		1,750	
	Harris, L. Morwenna		Art	Phys. Cul.	1912	10½	1½			1,300
	Lynch, Mary E.			Phys. Cul.	1918	13½	2½			1,300
	Glasgow, Marion I.		(Ho. Sci. Instr.)	Phys. Cul.	1918	4½				1,300
	Short, J. Clinton		(Phys. Cul., Instr.)		1920					
Port Rowan ..	Smith, S. Louise			Art	1920	10½	3	1,800		
	(Teacher to be appointed)									

* Temporary certificate as Principal.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Prescott.....	Greig, Earl H.	B.A., Queen's.....	Phys. Cul. .....(Int.)	.....	1916	4½	....	1,950	.....	.....
	Goulding, Hanna M.....	.....	Phys. Cul., Art.....(Int.)	.....	1911	17½	2½	.....	.....	1,650
	Allen, Lillian M.	B.A., Tor.	.....	Art, Phys. Cul..	1920	6½	....	.....	.....	1,700
	Cumming, Mary E.....(Int.)	B.A., Queen's	Eng. and Hist.....	Phys. Cul. ..	1921	....	....	.....	.....	1,500
Richmond Hill	Elliott, Thomas E.	B.A., Tor.	Fr., Ger. & Eng.	.....	1920	32	....	2,000	.....	.....
	Stanley, Pauline M.	B.A., West.	.....	.....	1920	2½	....	.....	.....	1,300
	Collins, Warren A. ....(Int.)	.....	.....	.....	1921	....	....	.....	1,300	.....
Ridgetown....	Cameron, James G.	B.A., Queen's.....	.....	Art, Phys. Cul.	1919	19½	14½	2,200	.....	.....
	Dorrance, Annie V.	.....	Art (Int.). Phys. Cul.....	.....	1919	3½	6	.....	.....	1,300
	Foster, Jessie	B.A., Queen's	Fr. and Ger.....	Phys. Cul.	1920	19	....	.....	.....	1,600
	Spark, George	B.A., Tor.	.....	Agr. & Hort. .	1921	6½	3	.....	2,000	.....
	Switzer, Josie E.	.....	.....	.....	1921	9½	4	.....	.....	1,700
Rockland.....	Clark, Joseph C.	B.A., Tor.....	Classics	Phys. Cul.....	1920	23	2½	1,500	.....	.....
	O'Toole, Mary E. .....(Int.)	.....	.....	Art	1920	½	2½	.....	.....	1,400
	Hanbidge, Frances J.	.....	Phys. Cul. .....(Int.)	.....	1920	3½	....	.....	.....	1,400
Sault Ste. Marie	Rudlen, George W.	B.A., Tor.....	Math.	.....	1904	22	....	4,000	.....	.....
	Walkom, Daniel T.	B.A., Queen's.....	.....	.....	1911	11	3½	.....	3,000	.....
	McKinnon, Charles	B.A., Tor., M.A., Chi..	Phys. Cul., Classics.....	.....	1917	16	3½	.....	3,000	.....
	Robb, James A. M. ...(Int.)	B.A., Queen's.....	.....	Phys. Cul.....	1919	1½	½	.....	2,000	.....
	Sabine, Ernest L. ....(Int.)	B.A., Queen's	Eng. and Hist.	Phys. Cul., Art.	1920	½	11	.....	2,000	.....
	Patterson, Harriet A.	B.A., Queen's.....	Eng. and Hist.....(Int.)	.....	1914	14	....	.....	.....	2,800

	Clayton, Vivian E.	B.A., Man.	Art, Com.		1908	14½	1½			2,800
	MacKenzie, Anna				1910	10½	11			2,000
	Crummer, Eva M.		Phys. Cul. (Int.)		1917	11	1½			2,000
	Irving, Jessie C.	B.A., Tor.	Math. and Phys.		1919	5½				2,600
	Scott, Ethel O.	M.A., Tor.	Mods.&Hist.(Int.),Fr.&Ger.	Phys. Cul.	1920	8½	4½			2,200
	Smith, S. Ada	M.A., Tor.	Mods. & Hist. (Int.), Com.	Phys. Cul.	1920	7½				2,200
	Later, Thomas J.		Man. Train.		1910	10	10		2,800	
	Shaw, Mary P.		(Ho. Sci. Instr.)		1910	14				2,000
Shelburne	Butcher, C. Ward	B.A., Queen's	Math. (Int.)	Phys. Cul.	1919	7½	3½	2,300		
	Eckhardt, Jessie E.	B.A., McGill		Phys. Cul.	1918	8½	2			1,500
	Murchison, Mary B. (Int.)				1920	½	4			1,200
Simcoe	Christie, James D.	B.A., Tor.	Eng., Fr. and Ger.		1889	42		2,050		
	Martin, Thomas W.		Phys. Cul. (Int.)		1917	7½			1,850	
	Manning, Ernest D.			Phys. Cul.	1918	5½			1,850	
	Smith, Annie A.			Phys. Cul., Art	1920	6½	3½			1,500
	Grieve, Bessie M. (Int.)			Phys. Cul.	1921	2½	4			1,200
Smithville	Judge, Albert E.	B.A., Queen's		Phys. Cul.	1920	4½		2,000		
	Traver, Edith A.			Phys. Cul.	1920	8½	2			1,500
	Ross, Helen I. (Int.)				1920	½	2			1,400
Stirling	Kennedy, George E.	B.A., Vic.	Science	Phys. Cul.	1893	28	4	2,000		
	Powell, Mabel	B.A., Queen's	Mods. and Hist.	Phys. Cul.	1918	3½				1,400
	Weatherill, Lillian			Art	1918	3	4½			1,200
	Whiteman, Margaret (Int.)				1920	½	4			1,300
Streetsville	Rodden, Mary K.	B.A., Tor.		Art, Phys. Cul	1920	4½		2,000		
	Gerhardt, Harry W.			Phys. Cul.	1913	7½			1,700	
Sudbury	Cornwell, John L.	B.A., Tor.	Math.		1920	28½		3,800		
	Rose, Kathleen M.	B.A., Queen's	Math.		1917	3½				2,000
	MacDougall, Florence E. (Int.)	B.A., Queen's	Art		1919	1½				1,600
	File, Lillian A.		Com.	Phys. Cul.	1913	10½	6½			2,000
	Stewart, Winona	B.A., Queen's		Phys. Cul.	1920	5½	1			1,600
	Green, Walter W. H.	B.A., Queen's	Phys. Cul. (Int.), Science		1921	5			3,000	
	Kerr, Maybelle G.	B.A., Tor.	Mods.&H.,Phys.Cul.(Int.)		1920	5½				1,600
Sydenham	Sine, Frederick	M.A., B.Sc., Queen's	Science (Int.)	Agr. & Hor.	1915	13½	5	2,500		
	Hunter, Lily P.	B.A., Tor.	Phys. Cul. (Int.), Art	Phys. Cul.	1919	3½				1,300
	Foster, Laura A. (Int.)	B.A., West.	Phys. Cul.		1920	1	1			1,300
	Morrow, Consuelo B. (Int.)	B.A., Queen's	Art	Phys. Cul.	1920	2½				1,400

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries. Principal	Male Assistants	Female Assistants
								$	$	$
Thorold.....	Haynes, Andrew C.	B.A., Tor.	Phys. Cul. .....(Int.)	Voc. Mus.	1920	9½	3	2,500	.....	.....
	Clark, Alice B.	.....	.....	Art	1920	2½	2	.....	.....	1,600
	Park, Leonora	B.A., Tor.	.....	Phys. Cul.....	1921	3½	2	.....	.....	1,600
Tillsonburg...	Auld, Charles	B.A., Tor.....	Math.	.....	1914	26	....	2,500	.....	.....
	Sinclair, Robt. J.	.....	Phys. Cul.	Agr. & Hor...	1915	9½	2	.....	2,000	.....
	Hindson, Hilda M.	.....	Phys. Cul. (Int.), Com....	Art.....	1904	16	6	.....	.....	1,600
	Kennedy, Jessie	B.A., Queen's	Phys. Cul.	.....	1920	5	¾	.....	.....	1,500
	Kay, Lydia M.	.....	Phys. Cul. .....(Int.)	.....	1919	6½	1	.....	.....	1,300
Toronto, Commerce..	Eldon, Robert H.	B.A., Queen's.....	Math., Com.	.....	1911	29	7	4,375	.....	.....
	Ward, William	B.A., B.Pæd.,Queen's.	Com.	.....	1911	26	5	.....	3,375	.....
	Fletcher, William H.	M.A., Queen's.....	Science, Com.	.....	1911	25½	4½	.....	3,375	.....
	VanEvery, John F.	B.A., Tor.....	Eng., Hist., Fr. and Ger...	.....	1912	23	....	.....	3,000	.....
	Baird, William	.....	Com.	.....	1911	18	4	.....	3,375	.....
	Conlin, Evelyn E.*	B.A., Tor.....	Mods. and Hist.	.....	1911	18½	....	.....	.....	3,125
	Keast, Walter	B.A., Tor.....	Math.	.....	1916	14½	4½	.....	3,375	.....
	Edward, Wesley G.	B.A., Tor.....	Com.	.....	1911	15½	1	.....	3,125	.....
	Bailey, Joseph J.	.....	Com. .....(Int.)	.....	1911	16	5½	.....	3,125	.....
	Webster, Samuel C.	B.A., Tor.....	.....	.....	1911	19	2	.....	3,125	.....
	Harry, Frank T.	.....	Com.	.....	1913	7½	13½	.....	2,875	.....
	Smith, Clayton R.	.....	Art, Com.	.....	1914	12	5	.....	2,750	.....
	Mathieson, Elsie	B.A., Tor.....	Eng. and Hist.	.....	1914	10	6	.....	.....	2,625
	Francis, Annie B.	B.A., Tor.....	Mods. and Hist.	.....	1915	17½	1	.....	.....	2,625
	Stockdale, Thomas N.	.....	Phys. Cul., Com.	Art.....	1916	12	4	.....	2,500	.....
	Hare, Arthur F.	.....	Com. .....(Int.)	.....	1916	7½	8½	.....	2,625	.....
	Lailey, Marion B.	M.A., Tor.....	Phys. Cul. .....(Int.)	.....	1916	9	....	.....	.....	2,375
	Harvey, Humphrey G..(Int.)	.....	Com.	.....	1916	4½	8½	.....	2,500	.....

	Ramsay, James A.	B.A., Queen's	Art (Int.), Com.		1917	11½	11	2,375		
	Ferguson, W. Stanley (Int.)	B.A., Queen's			1917	3½	8	2,375		
	Batchelor, Edna G.	B.A., McM.	Mods. and Hist.		1917	3½			2,250	
	Henry, Stanley Hunter	M.A., Queen's	Sci. (Int.), Math. & Phys.		1918	10½		2,250		
	Atkin, Edith L.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1918	5½			2,250	
	Cavell, Ernest E.		Com. (Int.)		1918	2½	8½	2,250		
	Dickson, Lucy I.		Com. (Int.), Phys. Cul.		1918	2½	5½		2,125	
	Bain, Mary	B.A., Tor.	Phy. Cul. (Int.), Mods. & H.		1916	8			2,125	
	Hampson, Edward (Int.)	B.A., Queen's	Com., Art, Phys. Cul.		1919	1½	18	2,125		
	Spence, Frank A. (Int.)		Com.		1919	1½	4	2,500		
	Davidson, Viola M.	B.A., Queen's	Art, Science (Int.)		1919	8½	1		2,125	
	Proudfoot, Rolph M. (Int.)		Com.		1920	½	8½	2,375		
	Rae, Margaret (Int.)	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	½			1,875	
Toronto, Davenport	Wood, Frank H.	B.A., Tor.	Math.		1920	12		3,375		
	Halbert, Edwin J.	B.A., Tor.	Science		1920	11½	3	3,000		
	Hutchinson, John I.	M.A., Tor.	Eng. and Hist.		1920	12		3,000		
	Ketcheson, F. Blanche	B.A., Tor.	Mods. and Hist.		1920	15			3,125	
	Lamb, Walter J.	M.A., Queen's	Math.		1920	7	3	2,875		
	Morrow, John D.	B.A., Tor.	Class.	Phys. Cul.	1920	24½		2,875		
	Smith, Hilda C.	B.A., Tor.	Phys. Cul. (Int.), Art		1921	6½			2,085	
Toronto, North	Reed, George H.	M.A., B.Pæd., Tor.	Classics		1910	32½	4	3,875		
	Shaw, Robert	B.A., Tor.	Math.		1913	19	3	3,375		
	Clark, Luther J.	B.A., Queen's	Phy. Cul. (Int.) Fr. & Ger.		1914	30½	5½	3,375		
	Keillor, James	B.A., Queen's	Eng. and Hist.		1915	29	3	3,375		
	Murdoch, William E.	B.A., Tor.	Classics	Phys. Cul.	1920	10½	16	3,125		
	Scanlon, Mary G.		Phys. Cul., Art		1911	12	2½		2,625	
	Kennedy, M. Isabel (Int.)	B.A., Tor.		Phys. Cul.	1919	2	½		1,875	
	Ayers, M. Huntley	M.A., Queen's	Science		1920	16½	8	3,125		
	Quirk, Eric (Int.)	B.A., McM.	Math. & Phys., Phys. Cul.		1920	½		1,875		
	Allen, Mabel E.	B.A., Tor.	Mods. and Hist.		1920	14			2,125	
	Reynolds, Norman W. (Int.)	B.A., Tor.	Phys. Cul.		1920	½		1,975		
Trenton	Whyte, Robert	B.A., Tor.		Phys. Cul.	1910	25	4	2,600		
	McCauley, Ina H.	B.A., Tor.	Ph. Cl., Mods. & H. (Int.), Eng. and His.		1918	2½			1,700	
	Alcombrack, Edna A.	B.A., Tor.			1919	7½			1,700	
	Gillham, M. Estella		Art (Int.)		1920	3½	1		1,400	
	(Teacher to be appointed)									
Tweed	Irwin, Alfred H.	B.A., Queen's	Phys. Cul. (Int.)		1916	9	1½	2,450		
	Truscott, Edith (Int.)	B.A., Queen's		Phys. Cul.	1920	½			1,200	
	Quinlan, V. May			Art	1920	3½	1		1,300	

*Quallfied to teach Spanish.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1921—Continued

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Uxbridge	Welsh, David A.	B.A., Tor.		Agr.&Hor.,P.C.	1917	10½	2½	2,500		
	Peck, Maud M.	B.A., Tor.		Phys. Cul.	1920	2½	2			1,600
	Strang, Rose I.			Phys. Cul.	1917	23				1,500
	Parr, Sarah E.		Phys. Cul., Art		1919	10½	8			1,300
	Donnelly, Mina B.	B.A., Queen's	Class.		1920	3½				1,800
Vienna	French, Fred. Wm.	B.A., Tor.	Class.		1920	23½		1,700		
	Mark, Alfred E. (Int.)				1920	4	6		1,100	
Walkerton	Anderson, Wm. Geo.	B.A., Tor.	Class., Eng. and Hist.		1920	19½	3½	2,500		
	Fasken, Samuel A. (Int.)	B.A., Tor.	Phys. Cul.		1920	½	3½		1,700	
	McGregor, Margaret C.	B.A., Tor.		Art	1908	13½	1½			1,600
	Sillers, Marion R.	B.A., Queen's		Phys. Cul.	1920	4½	4			1,600
Wallaceburg	Dickenson, Edgar U.	B.A., Tor.	Phys. Cul.		1904	16	3	2,500		
	White, Lloyd	B.A., Queen's		Phys. Cul.	1920	2½	7		2,000	
	Shaw, Ada E.	B.A., Tor.		Phys. Cul.	1918	2½				1,500
	Bole, Abbie M.	B.A., Queen's		Phys. Cul., Art	1921	3½				1,500
Wardsville	Farrington, Mabel C.	B.A., Tor.		Phys. Cul.	1916	7½		1,550		
	Dykes, Vera K.		Phys. Cul.		1920	3	2			1,200
Waterdown	Forbes, William B.	B.A., Queen's	Phys. Cul. (Int.), Sci.		1920	25	1	2,000		
	Harvey, Mary L. (Int.)	B.A., Tor.		Phys. Cul.	1920	½				1,200
	McCoy, Margaret H.S. (Int.)	B.A., Tor.	Phys. Cul.		1921	½				1,500
Waterford	Rowntree, Annie E.	M.A., Tor.	Phys. Cul., Mods. and Hist.		1910	10½	5	1,800		
	Tuck, Ella M.	B.A., Tor.	Phys. Cul. (Int.)	Art	1919	2½				1,300
	Franklin, Marion M.	B.A., Tor.		Phys. Cul.	1918	2½				1,100

Watford	Cameron, Murray	B.A., Queen's		Phys. Cul.	1920	4½	2,400			
	Ballantyne, Geo. Angus (Int.)	M.A., Tor.	Math. and Phys.	Phys. Cul.	1919	1½		1,900		
	McCaw, Hester E. A.	B.A., Tor.	Eng. and Hist.		1912	12½			1,550	
	Mitchell, Blanche H.			Art	1907	13½	4		1,500	
Welland	McCuaig, Herbert M.	B.A., Queen's			1891	36	2,500			
	Johnson, Guy E. (Int.)	M.A., Queen's	Science	Phys. Cul.	1920	2½	2	2,400		
	Thomson, Helen M.	B.A., Tor.	Math.		1908	12½	3		1,800	
	Brennan, Jennie L.		Art		1906	14½	4		1,700	
	Ross, Margery E.	B.A., Tor.	Phys. Cul., Mods. & Hist.		1915	6½			1,500	
	MacLaurin, M. Louise (Int.)	B.A., McM.	Eng. and Hist.	Phys. Cul.	1919	2	3		1,400	
	Fritz, Myrtle E.		Com. (Int.)		1919	5½	½		2,000	
	Cameron, Allan A.			Phys. Cul.	1921	15½	3	1,900		
Weston	Pearson, Alexander	B.A., Tor.	Science	Agr., P.C., Com.	1914	27½	3,000			
	Graeb, Mabel M.	M.A., Tor.	Mods. and Hist.	Phys. Cul.	1911	12			1,700	
	Dufton, Lena I.	B.A., Tor.	Class.	Phys. Cul.	1920	11½			1,750	
	Moir, M. Isabelle	B.A., Tor.	Art (Int.)		1919	9½			1,400	
	Jeffrey, H. G. Stirling	B.A., Tor.	Math. and Phys. (Int.)	Phys. Cul.	1919	2½		1,900		
	Gillies, Ina M.	B.A., Tor.	Phys. Cul. (Int.)		1920	2½	1½		1,350	
Whitby	Ireland, Norval J.* (Int.)	B.A., Tor.			1920	1½	4	2,000		
	Gregory, Alice E.	B.A., McM.	Phys. Cul. (Int.), Classics		1917	3½			1,600	
	Lemon, Robert C.	B.A., Tor.	Eng. and Hist.		1919	2½		1,500		
	Carroll, William I. (Int.)	B.A., Queen's	Phys. Cul.		1920	½	4	1,700		
	West, John F. (Int.)		Phys. Cul.		1920	1½		1,700		
	Miller, Gladys M.		Art	Phys. Cul.	1920	2½	3		1,500	
Wiarton	Hamilton, John R.	B.A., Queen's		Phys. Cul.	1912	11½	2,200			
	Shepley, Addie M.			Phys. Cul.	1920	3½			1,400	
	Tully, Oral L. (Int.)			Art	1920	1	2½		1,250	
Williamstown	Barrett, Wellington J. C.	B.A., Queen's		Phys. Cul.	1919	6½	2,100			
	Cattanach, Jessie S.	B.A., Queen's		Phys. Cul.	1910	10	4½		1,650	
	Waddell, T. Kenneth	B.A., Queen's		Phys. Cul., Agr.	1919	3		2,000		
	Ross, Edith I. (Int.)	B.A., Queen's		Phys. Cul., Art	1920	2½			1,500	
Winchester	Barlow, Fred. J.	B.A., Tor.	Art	Agr., Phys. Cul.	1917	6½	2	2,100		
	Rogers, W. Cruess	M.A., Queen's	Art	Phys. Cul.	1919	10	2½	1,550		
	Fowler, Edith I. (Int.)	B.A., Tor.	Classics	Phys. Cul.	1919	1½			1,100	
	Brookins, Marjorie (Int.)	B.A., Queen's	Fr. and Ger.	Phys. Cul.	1920	½			1,100	
	Rose, Maude L.			Art	1920	6½	4		1,000	
Wingham	Brackenbury, George L.	B.A., Queen's		Phys. Cul.	1920	8	1	2,500		
	McConnell, Jean M.	B.A., Queen's	Class (Int.)		1920	4	8		1,800	
	Finch, Ethel B. (Int.)	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	½	1		1,700	
	Hamilton, Grace A. (Int.)	B.A., Queen's	Phys. Cul.		1920	1	1		1,800	
	Parker, Mrs. Norma			Art, Phys. Cul.	1920	6½			1,700	

*Temp. certificate as Principal.

SUMMARY, COLLEGIATE INSTITUTES AND HIGH SCHOOLS, JANUARY, 1921

Number of Schools, Sex of Teachers, and Percentages

Schools

Collegiate Institutes	47
High Schools	121
Total	168
Increase for the year	1

Teachers

Men	587
Women	620
Total	1,207

Percentages

Jan. '21:	Men,	48.63;	Women,	51.36
" '20:	"	49.14;	"	50.85
" '19:	"	48.71;	"	51.28
" '14:	"	59.27;	"	40.72
" '09:	"	67.55;	"	32.45
" '04:	"	78.80;	"	21.20

Number of Teachers

Collegiate Institutes

Principals	47
Assistants	617
Total	664

High Schools

Principals	121
Assistants	422
Total	543

Grand Total

Principals	168
Assistants	1,039
Grand Total	1,207
Increase for the year	39

Salaries

Collegiate Institutes

Highest Salary	$4,500
Average " Principals	3,203
" " Male Assistants	2,478
" " Female "	1,863
Average Salary	$2,251
Increase for the year	172

High Schools

Highest Salary	$4,375
Average " Principals	2,315
" " Male Assistants	2,142
" " Female "	1,550
Average Salary	$1,843
Increase for the year	320

Collegiate Institutes and High Schools

Highest Salary	$4,500
Average " all Principals	2,563
" " all Assistants	1,987
Average Salary, all	$2,067
Increase for the year	239
Average Salary, Male Assis'nts.	$2,390
" " Female "	1,705
Increase for year, Principals	$349
" " Male Assistants	209
" " Female "	240

University Graduates, Specialists, etc.

Collegiate Institutes and High Schools

Graduates	895
Non-Graduates	312
Graduates, Jan., 1921	74.15 per cent.
" " 1920	73.11 "
Non-Graduates, Jan., 1921	25.84 "
" " 1920	26.88 "
Interim Certificates	227
Specialists	629
Interim Specialists	262
Specialists and Int. Specialists Jan. '21,	73.81 per cent.
" " " '20	72.08 "
Non-Specialists, Jan., 1921	26.18 "
" " 1920	27.91 "
Elementary Certificates in Art	91
" " Physical Culture	373
" Commercial Certificates	5
" " Manual Training	1
" Certificates in Farm Mechanics	10
" Vocal Music	2
Intermediate Certificates in Agricul. and Hort.	37

APPENDIX Y

ONTARIO SCHOOL FOR THE BLIND

ANNUAL REPORT OF THE SUPERINTENDENT

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to transmit herewith the Forty-ninth Annual Report of the Ontario School for the Blind, Brantford, for the year ended 31st October, 1920.

I have the honour to be,
Sir,
Your obedient servant,

W. B. Race,
Superintendent.

Brantford, December, 1920.

The Attendance

In presenting the Forty-ninth Annual Report of the Ontario School for the Blind, I beg to report the average attendance for the session which ended June, 1920, as 108, and a slight decrease in the total registration for the school session commencing September 22nd, 1920, from 110 to 106. The registration of pupils for the twelve months of the official year from October 31st, 1919, to October 31st, 1920, was 136, just eight more than in the preceding year.

There is very little variation in the attendance from year to year, and although a large number of new pupils are being admitted in the September term, a greater proportion than usual of older pupils have been withdrawing owing to the ease of obtaining employment. If a period of industrial depression should set in there will be less inclination to leave the school until a more thorough grasp has been obtained of the work in the Literary and Music Departments.

Blind Children Not Attending

That there are many blind children in the province who are not attending our school for one reason or another is quite evident, and several reasons may be given by way of explanation. There are some to whom the existence of the school is not known, and others, to whom its existence is well known, hesitate and even refuse to send their children owing to their reluctance to be separated from them. An appeal was made a few years ago to the Public School Inspectors, and elicited from many of them the reply that as far as they knew there were no blind children in their inspectorates, and yet from many of these counties applications came in

later in behalf of children who had been blind for several years. If the inspectors could co-operate with us by making enquiries from all school children through their teachers, I feel confident that the whole province would be thoroughly and effectively combed.

Changes in Staff

Miss Edith Harrington, Music Teacher for a period of years, resigned in August to get married, and her place has been filled by the appointment of Miss E. Jean Howell. Miss Harrington was a faithful and efficient teacher whose resignation was accepted with genuine regret, but we were fortunate in obtaining the services of an experienced teacher in Miss Howell, who has for the past twelve years been a teacher in the Pittsburg School for the Blind, although a Canadian and resident of Brantford.

Miss Mary Gilbert, the very efficient Girls' Nurse for many years, was taken down with pneumonia in February, and succumbed, after a very brief illness, in the school hospital. Her position has been filled by the appointment of Miss Sarah E. Scholefield, who has had several years' experience in a similar capacity at Port Simpson in the far West.

Mr. Paul Greenwood, for two years Boys' Supervisor, was succeeded by Mr. H. B. Tindall, of Toronto, who has had experience with boys which should make his services valuable here.

New Pupils at the opening of the Session, September 22nd, 1920

Name.	Address.
Barnstable, David A.	Winnipeg, Man.
Baxter, Harold	Wetaskiwin, Alta.
Clarke, Frederick A.	Toronto, Ont.
Dell, Pearl	Edmonton, Alta.
Duciaume, Francina	Rockland, Ont.
Duggan, Basil	Toronto, Ont.
Edmondson, Murray S.	Moose Jaw, Sask.
Fox, Marjorie I.	Oshawa, Ont.
Gilby, Norman	Purbrook, Ont.
Groom, William H.	London, Ont.
Kingsley, Norah C.	Bridesville, B.C.
Luckett, Stanley	Edmonton, Alta.
Mellick, Verna L.	Rapid City, Man.
Mollord, Robert L.	Stonewall, Man.
Philpott, Alfred E.	Brockville, Ont.
Sadeski, Mary	Souris, Man.
Scherger, Christian	Leader, Sask.
Shotbolt, Kate	Sturgeon Creek, Man.
Smith, Audrey S.	Collins Bay, Ont.
Taylor, Mabel	Edmonton, Alta.
Truscott, Ruth	Battleford, Sask.
Warren, George F.	Prince Albert, Ont.
Watson, Myrtle	Vancouver, B.C.

Pupils Registered in Session 1919-20

Name.	Address.
Anthony, Gordon	Brampton.
Bell, Stewart	Paisley.
Bellew, Clarence	Winter, Sask.
Bettridge, Edward	Brampton.
Black, Fraser	Fort William.
Braden, Milton	Calabogie.
Campbell, Charles	Toronto.
Carlson, Arthur	Victoria Harbor.
Carscallen, Archibald	Tamworth.
Conway, Ernest	Hough Lake.
Craig, Leslie	Petrel, Man.
Culver, John	Todmorden.
Davidson, Thorstein	Caspaco, B.C.
Dobbin, Bert	Toronto.
Duncan, Terence	Toronto.
Elmes, Alfred	Toronto.
French, Clayton	Anglia, Sask.
Gash, James	Vancouver, B.C.
Grausdin, John	Lettonia, Man.
Green, Edward	Dunnville.
Green, Harold	Elmwood, Man.
Hackett, John	Toronto.
Hartfield, Adolf	Lang, Sask.
Hill, Archibald	North Bay.
Hill, Norman	St. Thomas.
Hutchinson, Fernie	Fernie, B.C.
Jeffrey, Gordon	Beachburg.
Joyce, Judson	Ottawa.
Konopski, Albin	Valley River, Man.
Kozlowski, Joseph	Winnipeg, Man.
Lott, Ernest	Wingham.
Macalister, Donald	Macalister, B.C.
Macbeth, Stanley	Toronto.
Makey, Lawrence	Tilbury.
Martin, Joseph	Winnipeg, Man.
McIvor, Donald	Goderich.
McDonald, James	Clover Bar, Alta.
McLennan, John	Toronto.
MacLaren, Frederick	Merrickville.
Metcalfe, William	Toronto.
Miscampbell, Lester	Angus.
Mulholland, Thomas	Toronto.

Pupils Registered in Session 1919-20—Continued

Name.	Address.
Murray, Ancile	Goderich.
Niece, Robert	Lowbanks.
O'Brien, William	Peterboro'.
O'Neill, Mary	Ottawa.
Parfitt, Allan	Toronto.
Patrick, George	London.
Pennell, William	Allsaw.
Petrie, Aloysius	Hamilton.
Philpott, Frederick	Brockville.
Philpott, John	Brockville.
Powell, James	Toronto.
Richards, Laurie	Winnipeg, Man.
Stoddart, Ernest	Copper Cliff.
Sydor, Mike	Winnipeg, Man.
Sutherland, Joseph	Vancouver, B.C.
Towner, John	Toronto.
Troughton, Robert	Arthur.
Tuttle, Russell	Toronto.
Vance, D. Earl	Galt.
Vance, Frank	Saskatoon, Sask.
Webb, Harold	Barrie.
Wilkinson, Charles	Kingston.
Young, Kenneth	Binbrook.
Bews, Anna	Bridgeburg.
Bickerton, Gladys	Navan.
Brown, Gladys	Simcoe.
Brunsden, Alma	Brantford.
Clark, Jessie	North Bay.
Clark, Lillian	Mt. Dennis.
Clarke, Marguerite	Toronto.
Collins, Mabel	Regina, Sask.
Crawley, Daisy	Toronto.
Dalton, Mary	Hamilton.
Dawson, Christina	Toronto.
DeCarlonis, A.	Peterboro'.
Dupuis, Agnes	Brantford.
Edwards, Mary	Toronto.
Folis, Rose	Winnipeg, Man.
Fuson, Dora	Winnipeg, Man.
Gascoigne, Marjorie	Hamilton.
Gill, Grace	Toronto.
Grey, Muriel	Winnipeg, Man.
Grills, Iva	Cane.
Hilton, Lydia	Belleville.
Hyndman, Elsie	Norwich.
Joyce, Patricia	Strathcona, Alta.
Krauser, Rose	Winnipeg, Man.
Lammie, Greta	Hensall.
McDonald, Christina	Dunvegan.
McEwen, Geraldine	Saskatoon, Sask.
MacGillivray, Agnes	Listowel.
Miller, Susan	Gravenhurst.
Mishnishcodare, E.	Manitowaning.
Nelson, Eva	Winnipeg, Man.
O'Neill, Mary	Ottawa.
Philpott, Emily	Brockville.
Reddick, Jessie	Toronto.
Regimbal, May	Norwood Grove, Man.
Sells, Kathryn	London.
Slay, Gladys	Sarnia.
Smith, Effie	Brantford.
Tolton, Edna	Guelph.
Wagner, Rose	Brantford.
Waswanapi, Mary	Cochrane.
Welsh, Verna	Baldur.
West, Bessie	Brampton.
Wiggins, Clarice	Stratton.

New Seats in Assembly Hall

The antiquated, unsightly and uncomfortable seats in the Assembly Hall have been replaced by comfortable opera chairs, and the effect is a decided improvement. A new maple floor was laid, and altogether the improvement in appearance and comfort is well worthy the expense involved.

June Concert

The concert at Christmas was not held owing to the prevalence of epidemics, but in June the pupils and teachers put forth a special effort to make up for the disappointment. The following report is taken from the *Brantford Expositor*:—

Class Graduates from the O.S.B.

PUPILS HEARD LAST EVENING IN PROGRAMME THAT WAS A FAREWELL FOR MANY OF THEM.

Another class of pupils from the Ontario School for the Blind left the safe refuge of the school to-day to take up their lives among what they themselves call "seeing people," equipped in the best way that it has been possible to direct them, as individuals, able to fill a place in spite of the handicap that is theirs. The closing concert was given last night at the school.

Principal Race introduced the pupils to the audience that is always large, and that last night was no exception. Most of those attending were of the opinion that it did not matter what the nature of the programme was; the real interest lay in the pupils, and in the way they did what was expected of them by their instructors, though they did many things not expected of them by the uninitiated outsider. Mr. Race has been making a point of training the pupils to make their way without the assistance of anyone on the platform and the surety with which the boys and girls moved about was a surprise.

To Civil Life

Principal Race made no formal address. He spoke of the pupils who would not return and stated that some of the most successful boys and girls were not coming back. One of the girls, Miss Gladys Slay, who sang very sweetly last night, Mr. Race said, was going to Sarnia, where she had secured a position as a dictaphone stenographer in a large manufacturing office. Several of the pupils, he said, were experts in this work. Mr. Race referred briefly to the work done in the classes, that could not be exhibited. He spoke highly of the teachers' efforts and extended best wishes to the pupils leaving for their holidays and particularly to those who did not intend to return in September when the school re-opens.

As a variation to the usual musical programme, two drills were given by the junior pupils, one a pretty flower drill in which the little people were very much admired while expressions of pathetic interest were heard on every hand. The other drill was a patriotic exercise, "Saluting the Canadian Flag," very precisely done by pupils who were totally blind.

The work of the choral class was particularly enjoyed; they gave an opening number, "American Battle Hymn," two part songs unaccompanied, "Lassie of Mine," and "Since First I Saw Your Face," a selection from "The Holy City," "List the Cherubic Host," while the girls from the choral class sang two part songs, "Indian Slumber Song" and "The Fairy Pipers."

Master Jimmie McDonald, who led the boys and girls in the patriotic drill was very much admired for his manly bearing. Little Jimmie is about ten years old, and his home is in Edmonton. In 1915 he picked up something that looked very harmless, but which was a bomb. It exploded and the lad lost his right arm just below the elbow and both his eyes. The parts he had to recite were given excellently, as were the lines assigned to all in the drill, each one telling some reason why the flag of Canada should be revered.

Miss Kathryn Sells proved to be one of the most skilled and tasteful musicians among the music classes. She has a career ahead of her and a means of being both useful and accomplished, for she showed her skill at the organ, playing "Largo," by Handel; Lemaire and Bach's "Allegro from Sonata No. 1." Miss Sells also played the piano, giving Liszt's "Rhapsody" with considerable finish and being one in a four part serenade.

Another of the girls who was warmly encored was Miss Susan Miller. Miss Gladys Bickerton showed promise as a soloist, giving Sanderson's "Spring's Awakening" with considerable feeling, and Miss Gladys Slay also sang sweetly "Musetta's Waltz Song" from "La Boheme."

One of the numbers on the programme that made a special appeal was a serenade for the violin, viola, piano and organ in which Miss Greta Lammie, Miss Susan Miller and Miss Kathryn Sells took part, and a meditation by Bach and Gounod by the same artists with Mrs. Jex playing the cello.

Mr. William Metcalfe represented the portion of the school's musicians on the programme, giving a very well executed piano solo, Chopin's "Polonaise in A Flat."

The other young ladies taking part in the programme who were enjoyed with equal zest were Miss Agnes MacGillivray, who sang with violin obligato, and Miss Geraldine McEwen, who played very well Tschaikowsky's "Paraphrase de Concert." The concert closed with a piano quartette, "Overture to William Tell," in which Agnes MacGillivray, Susan Miller, Mary O'Neil and Alma Brunsden took part.

Mr. Jex was unable to be present.

Illness During the Winter

A reference to the report of our physician, Dr. Marquis, will show we had more than our usual share of illness during the past year. Three cases of scarlet fever developed which gave considerable anxiety, as these were the first on record in the school for over twenty years. Owing to the danger of the disease spreading through the school, the patients were removed to the City Isolation Hospital until their recovery was complete. There is reason to suspect that the disease was introduced into the school by means of a parcel sent from a home not free from the infection. There were also many cases of mumps and chickenpox, both of which were introduced into the school by pupils who were exposed to them at their homes during the Christmas vacation.

To prevent a recurrence of a similar epidemic in the future, and to render it unnecessary to keep all the pupils at the school during the Christmas holidays,

a circular letter has been sent to the parents asking them to co-operate with the school officials by signing a certificate to the effect that their children had not suffered from, nor been exposed to, an infectious disease during the vacation, and that no pupil should be permitted to return to the school unless in the best of health.

The death of Miss Gilbert from pneumonia has already been referred to. Towards the end of the term in June a few cases of measles developed, but they were of such a mild type as not to cause any worry. Clarice Wiggins, a young girl from Stratton, in the Rainy River District, died in a convulsion after a very brief illness.

The Entrance Examination

The introduction of High School work into the school has had the desired effect of stimulating the efforts of the pupils in the senior Public School class. Seven were successful in passing the Entrance examination, and they are now proceeding with the more advanced work, while, at the same time, concentrating on piano-tuning and music.

Following are the names of the successful pupils:—

Verna Welsh, Alma Brunsden, Effie Smith, John McLennan, Frank Vance, Ernest Lott, Harold Webb.

The Boy Scouts' Movement

Mr. Tindall, the Boys' Supervisor, has interested the pupils in the Boy Scouts' Movement, and much interest is being manifested. It is good for the boys to try to do what seeing boys do, and they have thrown themselves into the work with a zest that is encouraging. Idleness is one of the things to be fought against, and the more the boys are occupied, the better it is for their well-being, both physical and mental.

A Visit from the Women's Music Club

The Women's Music Club of Brantford, under the leadership of Mrs. Leeming, paid a visit to the school during the winter, and gave a complete programme for the benefit of the pupils. This club has done much to develop and create an interest in music throughout the city, and it is gratifying to know that our school has been included in the series of programmes arranged. There are no greater lovers of music and keener critics than are to be found in our school.

Dramatic Recital

Rev. W. G. Martin, pastor of the Congregational Church, Brantford, delighted the pupils by reciting for them the story of Jean Valjean, and later the Christmas Carol. Mr. Martin's services have been in great demand, and his fame as a lecturer is growing. The pupils feel deeply grateful to him for his courtesy in enabling them to hear him in their own auditorium.

Classes in Sewing and Knitting

The work of the girls in the sewing and knitting classes has been creating greater interest of late on account of the privileges granted by the Sales Room in Toronto, operated by the National Institute for the Blind. Whereas the finished articles were formerly held in the school for display, and then sold after considerable delay, they are now sent to Toronto, where they find a ready sale, owing to the systematic handling of all work done by blind girls, not only in the school, but

throughout the province. This has resulted in more careful and painstaking work, and the cost to the school in supplying materials is greatly lessened, as the pupils buy their own supplies and make a profit from the sale of their own material and work.

The work in cooking is confined to a few of the older girls, owing to the lack of room in the present domestic science kitchen. It would be a decided improvement and a step in advance if this work could be enlarged by properly equipping a new domestic science room with all the latest appliances known in the art of teaching cooking, so that more emphasis could be laid upon this very necessary feature in a girl's training. I strongly recommend that this be done before the opening of another term, and will present a definite plan with this end in view, at the same time asking for the necessary appropriation in the estimates.

The New Braille

As the junior classes advance from one grade to the other, the proportion of pupils taking Braille Grade 1½ is increasing, and it has been found necessary to procure copies of the Ontario Readers to suit these classes. Fortunately, owing to the gradual transition from one system to the other, it is not difficult to keep pace with the demand, and to introduce also additional reading matter for use outside the class-room. Guides for writing have been obtained also, and the work differs in no respect from that of previous years, except that the system of point print is different. Many of the pupils take sufficient interest to learn both systems.

The Choral Class

Owing to the withdrawal of several of the older boys, the choral class, which has been such a marked success under the skilful guidance of Miss Killmaster, is not up to full strength for the coming year, and until the younger boys find their voices and get the necessary training, the work of the class will depend very largely upon the efforts of the girls. But this is to be expected in a school where graduating classes move out to take a place in the world and give way to others who undoubtedly will quite measure up to the high standard set by their predecessors.

Increasing Cost of Maintenance

A reference to the Bursar's report on expenditures will show an increase in the cost of maintenance per capita, but when it is considered that the cost of foodstuffs and fuel has made great advances during the past year, the increase is not to be wondered at. An increase in the salary schedule of teachers and employees to keep pace with the advance in salaries and wages throughout the province is also responsible for the greater sum of money expended. On the whole, however, the expenditures are within reasonable bounds, and compare most favourably with that of other institutions of the same kind.

Vaccination

Owing to the prevalence of smallpox in different districts of the province, Dr. Marquis advised that all pupils should be vaccinated who needed it. This caused very slight inconvenience and no discomfort worth mentioning, and is the proper safeguard suggested by the Health Authorities of Ontario.

Admittance of a few Returned Soldiers

At the request of the Department of Soldiers' Civil Re-establishment, two returned soldiers were admitted to take a brief course in piano-tuning at periods not to conflict with the work of the pupils in residence. After a few weeks' trial one of the young men dropped out to return to England, but the other one continued until the end of the term in June, and, according to the report of his instructor, he was diligent enough to leave the school well-equipped and proficient in the art of tuning pianos.

AIMS OF THE SCHOOL

Frequently there are enquiries for a prospectus regarding the work of the school, the courses offered, and the rules and regulations governing the admission of pupils. To render it unnecessary to issue a booklet for that special purpose it might be well to state here what should be generally known by the parents of blind boys and girls, and by all throughout the province who take any interest in the education and training of the blind youth of our country. It seems unfortunate that there are still in Ontario many people who are in ignorance of the advantages offered blind children by their attendance here, and steps are being taken to canvass every county and municipality so thoroughly that hereafter ignorance cannot be pleaded as the excuse for the non-attendance of children. In many instances, of course, parents are loath to part with their children, and they take refuge from the School Attendance Act by placing them under the care of quacks of different kinds in the forlorn hope of trying to restore a sight which has already, in many instances, been pronounced irretrievably lost.

Where It Is—What It Is—What It Does

The Ontario School for the Blind was established in 1872, and formally opened in May of that year. The site overlooks the valley of the Grand River, and includes one hundred acres of valuable land. The opportunities afforded to the pupils and other residents of the school for healthful recreation are more than usually ample. No school for the blind in either Great Britain or the United States will compare with this one in that regard. The school is greatly favoured, too, by being within the limits of the City of Brantford, one of the most enterprising in the Province. The city cars pass along St. Paul's Avenue at the entrance to our beautiful park, and radial lines pass on either side in the direction of Paris and Galt. The interest taken by the churches in the welfare of the pupils, the frequent intellectual and musical entertainments to which the latter have access, and the healthful, moral and social conditions generally, all act most favourably on the lives and characters of the young people thus brought in contact with them.

The school was founded for the purpose of imparting general education, as well as instruction in some professional or industrial art to all blind youths of both sexes, between the ages of seven and twenty-one, not being deficient in intellect, and free from disease or physical infirmity. It is not intended as an asylum for the aged or infirm, nor as a hospital for the treatment of disease; but in its design has reference only to the physical, mental and moral training of blind children.

It is required that all pupils sent to the school should be decently and comfortably clothed, and furnished with a sufficient change and variety of apparel to ensure cleanliness and comfort. A supply sufficient for the term must be furnished or guaranteed before the pupil can be admitted.

The regular session commences on the fourth Wednesday in September, and continues until the third Wednesday in June, at which time every pupil must be removed to his or her home or place of abode. Guides are provided where necessary at the beginning and the end of the school term to look after the safety of children when they are travelling, but parents wishing to have their children with them at the Christmas vacation are expected to make all arrangements for the journey, both going and coming, and to guarantee that they will not be exposed to any contagious disease.

No fee is charged for tuition or board, but parents must pay all travelling expenses to and from the school.

Terms of Admission

The term "blind persons" is liberally interpreted to mean those who, by reason of actual blindness or impaired or defective vision, are incapable of receiving instruction in the Public Schools. As a matter of fact, about half the pupils have some perception of objects, and have come after trying unsuccessfully to wrestle with the ordinary work of a school for the seeing. In many cases pupils come whose eyesight is in a critical condition from the strain imposed upon it by endeavouring to keep up with seeing pupils.

Pupils are admitted between the ages of seven and twenty-one years, but the rule is flexible enough to be disregarded if in the opinion of the Principal an individual case warrants an exception being made. But pupils must be free from bodily infirmity or mental deficiency.

The Course of Instruction

The courses of study followed in the Ontario School for the Blind are exactly the same as in the Public Schools of the Province, with the single exception of art. Pupils enter, however, at such a variety of ages that our system must be flexible enough to adapt itself to circumstances. Those who have had a previous training in the first grades of the Public School are given a test and placed in the class for which they are best fitted. But the child of seven or eight years who is attending school for the first time will receive his first lessons in the Kindergarten class, where he will learn all the little handy arts taught in the public Kindergarten schools, such as weaving, sewing, plaiting, and modelling familiar objects in clay. Here he gets his first ideas of music in the Kindergarten songs. Then his physical powers are developed systematically by exercises in a well-warmed and well-ventilated gymnasium. He will devote a short time daily to learning arithmetic in its elementary stages, and also be taught to read. Arithmetic is rendered easy by the use of blocks or other objects, and the alphabet is mastered by the aid of embossed cards. In this way a clever child will, at the end of a session, surprise his friends by the progress, in reading by the touch small words or even sentences, he has made.

As the pupil progresses he will take up new subjects of study in each class. Among these geography, taught by the aid of raised sectional maps, will be one of the most interesting. On these maps our own Province, with its counties, lakes, rivers, railways, cities, towns, etc., is carefully studied. The Dominion, with all its political divisions and geographical features, is mastered. Great Britain, with its commercial centres and other characteristics, is made perfectly familiar to the young pupils; while the United States and the Continents of Europe, Asia, Africa

and America, are all handled in turn on the same principle. That geography can be most successfully taught objectively is admitted. Many are the envious looks cast by public school teachers at our maps.

Natural history is taught with the aid of stuffed birds, animals, reptiles and fishes. The laws of hygiene are thoroughly impressed upon the minds of the pupils, which naturally tends to the development and maintenance of a robust and vigorous physical condition.

Blind pupils will, in all essential particulars, hold their own with the highest class in the public schools, while it is probable that they will really have a more complete acquaintance with certain subjects than their seeing competitors, and if a student has higher literary aspirations with a distinctively practical object, he can prepare himself here by fully qualified teachers for University Matriculation.

Music

There is a mistaken impression that the blind are gifted with musical talents to a greater extent than the average of seeing persons. But, as a matter of fact, there is nothing in blindness to quicken musical perceptions. Music is, however, a study particularly adapted to the blind, provided that the pupil has an ear that may be trained, and a musical sense that may be developed and cultivated. Remarkable results are attained, too, from the concentration of the mind on the study, which is easier to a blind person than to a seeing one. Every pupil in the school who can be taught music to reasonable advantage has the opportunity. But to expect us to make an accomplished musician out of a pupil merely because he is blind is absurd. Pupils of our school have passed very creditably the difficult examinations of the Toronto Conservatory of Music and the University of Toronto. Many are reaping the reward, as organists and music teachers, of the instruction they received at our school. That instruction includes the pipe organ, piano, theory, violin, and vocal music, and where the accomplishment is not complete enough to enable the pupil to follow it as a vocation in life, it at least contributes to the pleasure and joy of life, and it is just as important to make people happy as to make them money earners, and music is a powerful agent to that end. Where without such qualifications a blind man or woman might spend a dreary life in listless idleness, he or she may in this way attain a social position many sighted ones will envy.

Blind pupils are taught music just as are seeing ones, by note and by practice. They play just as deftly and correctly as those who have the best vision. The notes are taught in the ordinary way. Then the exercises are dictated by the teacher to the pupil, who writes them in a cipher, consisting of raised dots made with a stylus on stout paper, and so arranged as to constitute the several musical signs. These are read by touch, and the pupil practising at the piano reads with the one hand while he practises with the other, right and left alternately, so that either hand in turn serves for the eyes, and the piece is committed to memory and played over until the teacher is satisfied it is played correctly. Examinations are held annually in both the literary and musical departments by gentlemen of the highest reputation in the respective professions, and the results are fully conveyed to the parents.

Typewriting

All well-organized Schools for the Blind make provision for instruction in the use of the typewriter. It supplies the pupils with a convenient means of correspondence very superior to the pencil and grooved card, and its use teaches

accuracy and precision in writing and spelling. The use of the dictaphone renders it unnecessary for those who wish to become typists to depend upon shorthand notes, and several of our girls have become quite expert.

Piano-Tuning

Special attention is paid to piano-tuning, as this vocation is one in which the blind can always excel, and they compete with seeing tuners on equal terms. One can become an excellent tuner without becoming a thoroughly successful pianist, although it is always urged that those who wish to become tuners should become proficient players, for reasons that are obvious. There are altogether thirty-five pianos in the school, as well as an excellent pipe organ, and pupils are taught to understand the mechanism of the instruments. All the pianos used are repaired in the school, and the pupils have the benefit in this way of learning from their instructor much about the structure of the instrument and the execution of such repairs as a tuner is expected to undertake. Pupils graduating from the tuning department receive a complete outfit of tools and a certificate vouching for his qualifications. Many are filling remunerative positions throughout the province.

Manual Training

Under the supervision of an expert instructor the boys are given the same opportunity at manual training as is found in the Public and High Schools, and it is really remarkable how expert they become in the use of tools and in the construction of different articles of wood-work. Cane chair-seating, too, is soon learned, and many of the smaller boys take delight in exhibiting their skill in this respect in their own homes, where the work can be done with little inconvenience. Broom-making is also taught, and as brooms are a necessity in every household, lucrative employment has been found for those who select this form of handiwork. But even to those who do not, or are not likely to go permanently into a workshop, there comes such an insight into mechanical methods as may be useful to them in after life.

The Sewing Classes

Under the watchful supervision of a skilled and patient teacher, the girls, whether they choose to adopt music as their profession or not, must follow an outlined course of instruction in sewing. The faculty of passing spare moments delightfully, and of entertaining others with music, vocal or instrumental, is by no means to be depreciated. But the usefulness in the family circle will be complete if, in addition to a delightful accomplishment, the homelier ones of sewing, knitting, fancy-work, and cooking are available, and all these are obtainable by our pupils. Both hand and machine sewing are taught, and not only plain sewing, but every form of work for which the ingenuity of the inventor has supplied an "attachment" to the sewing machine.

Knitting and Fancy Work

The classes in knitting and fancy work afford a rather wider scope for earning money than does the former branch, however useful in a domestic sense the art of sewing may be. The girls buy their own wools, and, under the guidance of their teacher, they make knitted articles of every description, which find a ready sale. Many execute orders for friends, who are glad to pay a fair price for the articles. At the great exhibitions on this continent and in Great Britain, both our sewing and knitting room specimens of work have been most favourably commented on.

The Cooking Class

This class is not designed for turning out what are known as professed cooks. To that distinction the most ambitious of our pupils does not aspire. But no one will deny that, as affecting the health and the comfort of the family, cookery takes a first place, and if the blind daughter can cook the dinner, set the table, and wash up the dishes while her sisters mind the store or teach in the school, and the mother performs her numerous matronly duties, the blind girl will be a treasure, and this is what we wish all our blind girls to be. At present the class is limited for want of space, and its operations have been somewhat curtailed in consequence. But steps have already been taken for the extension of this work, and greater results will be attained.

Physical Culture—Gymnasium

Given the most healthful surroundings, it is universally admitted that the blind youth needs something more. The robust exercises in which seeing youths indulge, and which go so far to develop the muscle and give a tone to the whole system, are almost altogether beyond the reach of the blind. The tendency of blindness is to limit physical exercise and to acquire a generally inactive habit. This manifests itself by a desire to sit down and pass away in idleness moments that could be used with profit to the health and physical development. A well-equipped gymnasium helps to overcome this, and this advantage in our school has a most marked beneficial result. Well warmed and ventilated, the gymnasium can be used at all seasons, and is a splendid place for recreation, even when not needed for systematic instruction. The classes assemble at fixed periods as part of the regular curriculum, and are put through their several exercises according to a perfectly scientific method. In addition to this there are opportunities for recreation out of doors. Slides and swings are provided for both boys and girls, and a running track with wires, to which rings are attached by ropes, enable the pupils to run as fast as their legs will carry them without fear of stumbling or getting off the beaten track.

Club Rooms

The boys' club room is fitted up with tables and comfortable chairs, to which they repair at stated times for such games as cards, dominoes, checkers, bagatelle, in all of which they take a great interest. The girls, too, have a sitting-room, in which they have a piano, and many happy moments are spent there after the classes for the day are over, and on holidays.

How the Day is Spent

A brief sketch of the daily life of the pupils will be interesting. The day begins with the ringing of the large bell at 6.30 a.m. That is the signal for everyone to be stirring. Pupils must rise, and, after dressing, make their own beds, although some of the smaller boys and girls are unequal to the task, and in the case of others, a certain amount of "tidying" is necessary. Breakfast is at 7.30, after which all pupils must take a morning walk over a prescribed route. At 8.30 the bell summons to the Assembly Hall. The attendance of all is obligatory on this occasion. The National Anthem is sung to the accompaniment of the pipe organ, after which necessary announcements are made by the Principal, and the news of the day in brief is given. The pupils always take a keen delight in this resumé of the morning paper, for it keeps them in close touch with current events,

and their information is quite up-to-date. A few records from the best artists are then placed on the victrola, or perhaps a selection is played on the player-piano, and the day is thus started with the melody of sweet music. The Roman Catholics then retire to a separate room, where a service is conducted by officials of their own communion. For the others, the services conducted by the Principal consist of hymn singing, Bible reading and prayers. At 9 o'clock the literary, musical, sewing and knitting classes commence, continuing, with an intermission of fifteen minutes, until a quarter to twelve. Dinner is at 12, and classes are resumed at 1.30, continuing until 3.30 or 4 o'clock, when nearly all are at liberty. Supper is at 5.30. At 7 o'clock the very young pupils go to bed, the older ones going to the Assembly Hall for evening reading from the best standard literature available. Letters are then read to the pupils or written for them, and the intermediate pupils retire to the dormitory at 8.30. The older pupils, who in the summer time walk about the grounds, or in the winter play games in their club-room, retire for the night at 9.30. On Saturday the younger boys and girls are taken for walks or down town to make purchases, and the older pupils are permitted to go out alone, those who have a slight degree of sight accompanying the totally blind. On Sunday, after the opening prayers, the pupils attend Sunday School classes for an hour in the school, after which everybody goes to church, old and young, under the care of their teachers, the denominations chiefly represented being Anglican, Methodist, Presbyterian and Catholic.

So it will be seen that life in the school is a busy active life, very different from what the imagination often pictures, and altogether the reverse of that which the blind child or youth is condemned to pass at home. It may safely be affirmed that, allowing for all the defects incidental to their various conditions, and often the lack of an early training, it would be hard to find any body of young people in this province more happy, lively, intelligent and self-respecting than the pupils of the Ontario School for the Blind.

Domestic Arrangements

The ground floor is devoted to class-rooms, business offices, reception room, etc., etc. On the floor above are teachers' sitting-rooms, pupils' sitting-rooms, and club-rooms, practice rooms and library. On the third floor is the large Assembly Hall, with its comfortable opera chairs, its fine pipe organ, and a commodious stage. On the same floor is also the hospital, elaborately equipped, in charge of a well-qualified trained nurse, whose duty it is to take care of those who are sick. In the rear annex are the dining-rooms, domestics' quarters, kitchen, store-rooms and bakery, while beyond these again are the engine-rooms and laundry. The boys' and girls' dormitories are on opposite sides of the main building. In these are to be found the very latest appliances. There are twenty-two rooms in each building for the pupils, each provided with three beds, three clothes closets, and one bureau with three large and three small drawers. The doors are numbered in brass tack point print. Besides the two stories on which the sleeping rooms are located, there are a basement and an attic, with rooms for storage, and every precaution has been used to make the buildings fireproof. In the basement are two large rooms fitted up with shower baths and tub baths, while on the bedroom floors there are several wash-rooms and lavatories which would be a credit to the finest hotel on the continent.

The manual training room is a large separate building, as is also the building where piano-tuning is taught. At a short distance from the main building are

the houses of the Superintendent and Bursar. The engineer occupies the lodge house at one of the entrances to the grounds. With two or three exceptions the officers reside on the premises. The general management devolves upon the Superintendent, while the Bursar attends to all financial matters and the purchasing of supplies. The Matron has entire charge of the domestic departments. In addition to the trained nurse there are also two thoroughly competent nurses, one for the boys and one for the girls, whose duties are to look after the clothing and to report to the head nurse, if necessary, any cases of illness which should go to the hospital.

The dietary is a very generous one, quite equal to that of any high-class boarding school, if not superior to most. The pupils have a hot dinner daily, with dessert and as great a variety as can be desired. At the same time the pampering of the appetite is discouraged, and pupils so indulged, as is often the case at home, soon learn to enjoy the plain but plentiful and wholesome provision made for them. Watchfulness over the pupils' health and prompt treatment in case of sickness are further secured by a daily visit from the school physician, and once a year at least a well-qualified eye specialist makes an examination of all the pupils' eyes. In addition to this, a thoroughly competent dentist takes care of the teeth of every pupil attending the school.

Correspondence

Pupils may correspond with their friends as often as they please, and once a month it is obligatory on them to do so. On that occasion the postage is provided by the school. All letters received for pupils are supposed to be opened by the Superintendent and handed by him to the respective officers on duty to be read to the receivers. The strictest confidence is observed in regard to the contents of such letters. Money remitted for pupils is placed in the hands of the Bursar, and it can be drawn out when required. This method avoids the risk of money being dropped or lost, with the disagreeable results such accidents are likely to entail.

Vacation

The regular annual session commences on the fourth Wednesday in September, and continues until the third Wednesday in June. Previous to the summer vacation all parents or guardians are notified of the place and hour at which the pupil may be expected to arrive. A similar notice is sent when the pupils reassemble. A guide usually accompanies every party of pupils to their destination. The railway companies grant special rates for the round trip on very liberal terms. It is cause for profound satisfaction that since the school's existence no accident attended with bodily injury has ever befallen a travelling pupil. The care taken by the guides and the very kind and thoughtful attention of the railway officials, who take a friendly interest at all times in the blind traveller, have conduced doubtless to their immunity from harm and danger.

Visitors

Visitors desirous of inspecting the work and methods of the school are welcomed at any time during school hours, and conducted through the building by an attendant. Saturdays and Sundays, however, are closed days. Pupils' friends and relatives are entitled to visit them when they please, but the school cannot undertake to provide accommodation for parents whose homes are at a distance.

Inspection and Control

The school is under the direct supervision of the Minister of Education. To him, as the representative of the Government, all the officials are strictly responsible. It is the wish of all connected with the school that everything should be done to enhance the comfort and happiness or aid the progress of the pupils, and thus strengthen the school in the confidence of the public. All applications for admission, or information, should be addressed to The Superintendent, Ontario School for the Blind, Brantford.

Date of School Opening

The term will re-open Wednesday, September 28th, of this year (1921), and the attention of the parents is drawn to the fact that pupils should not be permitted to return to the school without an adequate supply of clothing. It is not to be expected that sturdy boys and girls can go through the school year from September to June with only one suit of clothes and one pair of boots.

The following list is intended to draw attention to the articles of clothing needed, and it is also urged that each article be *plainly marked* so that there will be no danger of loss in the laundry:

Girls' List

All articles to be marked with name, and all to be in good condition.

4 Middies.
2 Skirts, dark and of good quality.
1 Sunday dress.
3 Undervests.
3 Pairs of drawers.
2 Dark petticoats.
1 Light petticoat.
3 Night dresses.
3 Pairs of stockings.
1 Pair rubbers.
2 Pairs of shoes.
1 Cap.
1 Pair of gloves for winter.
Comb and brush.
Tooth brush.
Kimona.
6 Handkerchiefs.
Slippers.
Extra shoe laces.

Boys' List

All articles to be marked with name, and all to be in good condition.

1 Suit for Sunday.
2 Extra pairs of pants.
1 Overcoat.
2 Light blouses (to be made with collar and waist band).
2 Dark blouses.
3 Suits of underwear.
6 Pairs of stockings or socks.
2 Pairs of boots.
1 Pair of rubbers.
2 Sweater coats.
2 Night shirts.
Suspenders.
1 Pair of mittens.
Neckties.
6 Handkerchiefs.
1 Tooth brush.
1 Comb and brush.
2 Caps.
2 Wash cloths.
Extra shoe laces.

PHYSICIAN'S REPORT

Hon. R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I beg to forward my report as Physician of the Ontario School for the Blind for the year ending October 31st, 1920.

From a health standpoint the session was a very serious one. Not only was there a great deal of sickness, but it is my sad duty to report two deaths. On

February 14th, 1920, Miss Gilbert died of pneumonia. She was an unusually fine type of womanhood. She was a most highly-respected officer in the school, and loved by many old friends in this city, where she had spent her life.

On June 11th, 1920, a female pupil died of meningitis, completing an attack of measles.

During the year we had to deal with a great many cases of contagious diseases. The cases occurred as follows:—

Scarlet fever, 3 patients; chicken-pox, 4 patients; mumps, 24 patients; pneumonia, 5 patients; erysipelas, 1 patient. The scarlet fever patients were transferred to Brantford General Hospital. The other cases were cared for in our own well-equipped hospital wards.

It is quite apparent that a great deal of good work was carried on.

During the year our competent professional nurse, Miss Wright, had under her charge, in addition to innumerable minor cases, 148 bed patients. Number of days spent in hospital, 1,206, or an average for each patient of 8.11 days.

I wish to again express my appreciation to your Department for installing in the school a proper hospital under the charge of a professional nurse.

I have the honour to be,

Sir,

Your obedient servant,

J. A. MARQUIS.

Brantford, November 1st, 1920.

REPORT ON MUSICAL INSTRUCTION

To the Honourable R. H. Grant,
Minister of Education.

Sir,—I have the honour to submit the results of my examination of the musical work accomplished at the Ontario School for the Blind during the past year.

The examinations in practical knowledge were conducted on June 1st and 2nd, and the theoretical papers on June 5th.

The practical subjects included piano, organ, violin playing, singing and voice culture, choral class work, piano and harmonium tuning.

The theoretical subjects were: Rudiments, four-part harmony, two-part counterpoint, elementary form and history.

The students' work at the piano was generally very good. Several students displayed natural ability quite beyond the average. These should become good teachers and artistic performers.

Miss Killmaster and her assistants, Miss Harrington and Miss Smyth, are deserving of high praise for their work in this important branch of musical study.

I would recommend that particular attention be given to touch and technique in all grades of piano teaching. In the intermediate piano examination one pupil gained honours and two passed. In the junior class, one gained first-class honours and one passed.

In the primary class, of four pupils examined, three passed and one obtained honours.

In the elementary class, three were examined, and, of these, two passed.

Two advanced students, who are in the progressive stage, performed admirably.

These, with further study and careful preparation, should be able to reach the licentiate standard.

In organ playing, the one candidate who was presented gained honours.

In violin playing, one pupil passed in the intermediate class.

Singing and Voice Culture.—A steady upward movement is going on in this department, not only in singing and tone quality, but in the highly important matters of pronunciation and enunciation. Of five pupils examined, three obtained honours, one passed and one just failed to reach the high standard of the intermediate division.

The school choral class is one of which any institution may feel proud. I listened with infinite pleasure to their singing of glees and part songs, accompanied and unaccompanied.

The quality of tone in soprano, alto, tenor and bass parts was uniformly good, the attack was keen, and the diction correct and clear.

These satisfactory results are due to the painstaking artistic teaching of Miss Killmaster, whose personal and musical influence is being felt more and more.

I was particularly struck with the reverent demeanour and refined hymn singing of the whole school at the morning prayer service, conducted by the Principal, Mr. W. B. Race.

Piano and Harmonium Tuning.—This class is in a very flourishing condition under the able guidance of Mr. Ansell.

Among this class of fourteen students are several who are quite expert at piano-tuning.

All the instruments in the school are now tuned and regulated from the tuning department.

A number of graduates of the O.S.B. have obtained well-paid appointments with large manufacturing firms of Toronto and elsewhere. One young man who went to China three years ago is doing good work there as a tuner.

Theory of Music.—Fourteen candidates were examined. In the senior division, two candidates were examined, and both obtained first-class honours.

In the intermediate class, one passed.

In the junior division, one obtained first-class honours and two passed.

In the higher classes the results were gratifying, but in the junior grade the work was uneven and somewhat disappointing.

I would suggest that the students be given one or two opportunities during the year of expressing themselves in a test examination in the simplest language possible, and not in the stereotyped language of a text-book.

The senior students should take up the study of three and four part counterpoint and other important periods of musical history.

In conclusion, I should like to offer congratulations to the Principal and to the Music Staff on the excellent work done during the past academic year.

I have the honour to be,

Sir,

Yours obediently,

ALBERT HAM,
Mus. Doc., F.R.C.O.

Toronto, June 9th, 1920

OCULIST'S REPORT

To the Honourable R. H. Grant,
Minister of Education.

Sir,—I have the honour to report the results of the examination of the pupils' eyes for the year, 1920.

Twenty-four new pupils, two more than last year, were examined—fourteen males and ten females.

A good many of the former pupils were examined, but as only slight changes were found, no particular comment is necessary.

Condition of Sight

	Males.	Females.	Total.
Without perception of light in either eye	1	1	2
Perception of light in one eye, none in the other	3	3	6
Perception of light in both eyes	3	2	5
Limited objective vision in one eye	2	2	4
Limited objective vision in both eyes	5	2	7
	14	10	24

From this table it may be seen that eleven of the twenty-four are so-called seeing pupils, but only four of these have sight enough to enable them to do much more than find their way about, and the disease causing the defective vision in one of the four is of an unavoidably progressive nature, which will only too soon put him in one of the other classes. All are unquestionably eligible to the school.

Diseases Causing Blindness

	Males.	Females.	Total.
Injury to one eye followed by sympathetic Ophthalmia in the other	2	2	4
Optic Atrophy	2	2	4
Glaucoma	1	2	3
Injury to both eyes	2	..	2
Microphthalmus	2	..	2
Undeveloped nerves	1	..	1
Retinitis Pigmentosa	1	..	1
Ophthalmia Neonatorum	1	..	1
Iridocyclitis	1	..	1
Aniridia	1	..	1
Cataract	..	1	1
Interstitial Keratitis	..	1	1
Symblepharon	..	1	1
Chorioiditis	..	1	1
	14	10	24

Seven of the twenty-four, just lacking one of thirty-three per cent., are blind from preventable causes. Four of these certainly might have been saved had the injured eye been removed in time to prevent sympathetic trouble in the other eye. While one would like to see the list free of Ophthalmia Neonatorum, only one case in twenty-four is a much better showing than was possible before the proper care of the eyes of the new-born was impressed on doctors, midwives and nurses. One of the cases of Optic Atrophy should probably be classed as preventable, as it was due to an injury to the head.

Very few acute conditions, or exacerbations of old troubles in the eyes, required my attention during the year, as our nurse has now become sufficiently familiar with these troubles to be able to handle them pretty efficiently.

Respectfully submitted,

Brantford, December 22nd, 1920. B. C. Bell.

LITERARY EXAMINER'S REPORT

To the Hon. R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—Herewith I submit my report as Literary Examiner at the Ontario School for the Blind, for 1920.

Changes in Staff

Since my last visit Miss Middlemiss and Mr. Hickey have resigned. These have been replaced by Miss Lowry and Mr. Langan. Miss Patterson is acting as Kindergarten Directress temporarily.

Organization and Equipment

The high school classes are in charge of Mr. Cole and Miss Summerby, and the public school classes are in charge of Mr. Cole, Mr. Langan, and Misses Macguire, Moffit, Lowry and Patterson.

The old double desks have been replaced by modern single desks, much to the comfort of the pupils. The curriculum of study is essentially the same as that in the Lower School of the Collegiates and the Public Schools. Instruction is given in both New York point and Braille, with the object of using only the latter as the classes progress.

High School Classes

French.—Pupils were familiar with the grammar, and translated freely. Conversational French is used in instruction.

Geometry.—The class had taken twenty-six theorems, and knew the work well.

Algebra.—The pupils did good work on a test in H.C.F., G.C.M., factoring and problems.

Grammar.—Analysis, parsing and syntax had been carefully taught.

Spelling.—The pupils made an average of 80 per cent.

Physics.—This subject is well taught, and the pupils showed appreciation of the subject.

Reading.—The pupils read intelligently, and showed an improvement in expression.

History.—The class was examined particularly on the Government of Canada. They showed a good grasp of the subject.

Literature.—Selections from the reader had been studied, also Julius Cæsar. Blind pupils love literature, and become proficient.

Geography.—This subject is being presented in a very rational manner, and less attention is being paid to memory work.

The Public School Classes

Miss Patterson covers essentially the same work as primary classes in the Public Schools. The pupils learn to read Braille, to spell short words, to add and subtract. They also do weaving, sewing, folding, raffia and clay modelling work. The class was generally proficient, except two pupils, who had not been in attendance all year.

Miss Lowry continues this work somewhat beyond First Book classes of the Public Schools. The pupils read and spelled well. In Arithmetic they did correct work in addition and subtraction, and in simple problems. Several memory gems had been learned. Pupils learn to write Braille.

Miss Macguire takes First and Second Book work along with some History, Hygiene and Nature. These classes are well up in Reading, Spelling, Writing, Arithmetic and Geography. Some good work in Oral Composition was given. The classes are very proficient in History and Hygiene.

Miss Moffit's class covers the Public School course of Second Book and part of the Third Book. This class was generally proficient except in case of two pupils who had been ill for some time.

Probably the best point about this class is its ability to think. The Reading, Spelling, Arithmetic, Geography and History being particularly good. A good start in Grammar and Composition is made in this form.

Mr. Langan has a class covering a Third Book course, and while he is new to this class of teaching, he displays signs of adaptability and success. The pupils did particularly well in Reading, Writing, Arithmetic and Hygiene, while the work in Spelling, History and Grammar were creditable.

Mr. Cole and *Miss Summerby* take the Fourth Book work, and the class was well advanced in Entrance work. It is hardly necessary to mention any subject in particular, as the class gave evidence of being well taught and of having taken interest in the work.

Manual Training Work

Mr. Donkin has the manual training broom-making, chair-caning and reed work all in one building. The usual interest and activity is seen here, and some fine specimens of work were on exhibit. Mr. Donkin has invented a saw guide which renders accurate work on the part of the pupils much easier.

Miss Haycock instructs the girls in knitting and crocheting, and many fine specimens of work were to be seen. The number and variety of articles on exhibit was not as numerous as in former years owing to the unusual price of materials.

Miss Cooper gives the girls a practical knowledge of sewing and cooking which must be of much practical value to them.

Miss Burden has a class of girls in typewriting. These girls have acquired great speed and accuracy, and should succeed at office work. The dictaphone was not in working order, and hence I was unable to see them use it.

General Remarks

(1) The organization and classification is much the best I have yet seen.

(2) The teachers are interested and active in their work, and are gradually covering more ground each year.

(3) The new seats for the pupils and desks for the teachers were much needed, and look more like the equipment of a modern school.

(4) The greatest improvement I see is that pupils are taught to think rather than to remember.

I have the honour to be,

Sir,

Your obedient servant,

E. E. C. Kilmer.

Brantford, June 5th, 1920.

The Convention in Baltimore

In Baltimore, in June of this year, the Biennial Convention of American Instructors of the Blind was held, at which there were representatives from Schools for the Blind from all parts of America, as well as a few from beyond the sea.

Mr. Eric Harilsted, Teacher in the School for the Blind, Christiana, Norway, had spent much of the preceding year visiting the various schools of the United States, and was full of enthusiasm over what he had seen. He gave many interesting comparisons of the work in this country and in Norway, stating, among other things, that they had no workshops for the Blind in Norway, as they are to be found in England, Germany, America and even Sweden, for two reasons: In the past, lack of money; and, in the present, lack of desire, as the workshop idea is "a passed stage in the evolution." In the main, the work there, though handicapped by smaller funds, is along the same lines and with the same ideals.

Madam Vanderkoff, Librarian for the Blind in Amsterdam, Holland, did not give a formal paper, but spoke extempore in excellent English, with just enough of an accent to be charming. She, too, emphasized the comparatively lavish expenditure of money on this side of the Atlantic. She said that they had to make their choice of books with much care, because all their books had to be made by hand. The greatest resource they had was the fine library of five thousand volumes at The Hague, from which they received every six or eight weeks collections of books. But she hoped that there were better things ahead "in the very few first years."

The third foreigner, Dr. Max Herz, of Austria, gave the convention a thrill by presenting them with two splendid inventions of his own, just perfected after years of labour. The first was comparatively simple, a new method for embossing. By this plan he cuts holes entirely through a metal plate, these holes corresponding to the respective characters of the Braille letter. A sort of putty or paste made, he says, of porcelain dust, is then applied on this plate, and it adheres to the sheet or paper directly under the respective holes, and, when lifted off, the paper contains the Braille characters in a rounded form, and, when dried, adheres very closely to the paper. He is able to print on both sides of the paper by this process, and to use the thinnest kind of paper, and if his method does work it will mean a very great cheapening in the cost of paper, since a so much lighter weight of paper can be used. The main trouble in regard to this process seems to be the inability to print at a high rate of speed.

Dr. Herz's other device is called his typophone, by which he hopes that the blind may be able to read by sound. He has developed a series of dots representing the letters of the alphabet, somewhat on the principle of the Morse telegraph, but instead of having its dots and dashes, it has dots, double dots, and quadruple dots. He claims that the quadruple dot give a sort of a burring sound, which he thinks the blind can distinguish when the ear has been sufficiently trained from the double dot. A disc is made containing these characters, and when this disc is placed on his little instrument, known as the "typophone," the reader turns the disc with his finger as rapidly or as slowly as he pleases, and through a needle and a sounding box these sounds are given back to the ear.

It may be asked how does this differ from the phonograph? And why not use a phonograph instead? In the phonograph a wax disc is made, the actual sound waves of the voice being recorded in this disc, but a great deal of space is required on the disc to record this sound. By Dr. Herz's method, the dots, double dots and

quadruple dots are made from the corresponding number of holes being cut through a little strip of paper tape. This tape is then applied to a machine he has devised which indents these dots on to the wax disc in very compact form. After the wax disc has been made, the principle of making the fibre discs from it is the same as in the phonograph. A master metal disc is cast from this wax disc and from this master metal disc the fibre discs are cast. The typophone can be constructed at a cost of ten to fifteen dollars, so it will not be an impossibly expensive matter for each of the blind readers to have one of these little instruments in his home. It is presumed that these discs can be made very cheaply and that the reader can either buy them outright or they can be loaned by libraries just as books are loaned. It is not claimed that this can ever take the place of Braille books for reading, but that it can be made possible for many to read by sound who seem not to be able to read by touch.

Dr. Samuel P. Hayes, Professor of Psychology, Mount Holyoke College, and Director of Research in several schools for the Blind, gave some conclusions he had arrived at as a result of his experiments. Speaking first of the manifest unfairness of the usual written examination, he made inquiry as to the possibility of more exact and fair means of measuring of ability. In testing 450 blind children he found that their spelling of ordinary words averaged rather above that of seeing children of their own age, but that in dictionary tests they fell well below. As Dr. Allen pointed out later on in his excellent report, this is natural, as their chief acquaintance with words is through the ear, which sense is not constantly teaching them their forms as the eye is. In Grammar he found the general average quite creditable, but in written composition four years retarded, and in arithmetic also much below standard. These definite returns were not very flattering, but there was much that was hopeful. His hearers felt stimulated to think for themselves how best they could make use of the suggestive material he placed in their hands. One felt that here was a science in the making and one that may be of incalculable benefit in the work of education.

Mr. McManaway, of Virginia, in discussion laid emphasis on the practical use of these tests to superintendent, to teacher and to pupil. It is useful in weeding out the feeble-minded pupils, in giving definiteness to the aims of the teacher, and in directing education along the right lines for the individual. When the results are not flattering he will look for the cause, and try to remedy the wrong.

Mr. Charles A. Hamilton, of Batavia, gave a paper on what our graduates do, showing the advantages and disadvantages of the various occupations open to the blind, and while he emphasized the necessity of each being taught some trade or profession, he glowed with the praise of a liberal education in enriching one's mind and broadening one's life. Perhaps even more than to the normal person a liberal culture is of inestimable value to one shut up in the prison of blindness. "For such a person there is nothing so efficacious as a liberally trained mind to transmute the black lead of despair into the gleaming gold of hope and the shining silver of contentment."

Mr. Chapple, of North Dakota, dealt with the problem of the feeble-minded blind child. Since the presence of such children is very detrimental to the work of the school, retarding the progress of normal blind children, lowering their standards and ideals, and injuring their status in the eyes of the world, such unfortunates should be placed in homes for the feeble-minded. As these homes, however, often refuse to accept the feeble-minded who are also blind, it behooves

all schools to agree on a policy and then to push it to completion. The scheme which seemed to promise best was that of establishing a special cottage for the blind in each asylum for the feeble-minded.

Mrs. Winifred Hathaway spoke eloquently on the subject of sight conservation classes in public schools. A boy is brought up before the juvenile court on various charges—he is idle, mischievous, sullen, a truant, etc., the judge sentences him to a visit to an oculist who finds his sight very defective. He is placed in a sight conservation class where ideal conditions of seating and lighting prevail, and, fitted with the proper glasses, soon becomes a happy progressive pupil. He takes all oral work, gymnastics, etc., in the regular class-rooms, and thus is not separated from his normal playmates, but at the same time the eyesight he has is carefully used and just as carefully guarded by the frequent visits to a skilful oculist.

Summing up, the speaker stated that the eyes of every child should be examined at the time he entered school and once a year thereafter during his school life, that eye clinics should be established in public schools, that proper lighting and seating conditions would do much to prevent deterioration in sight, that individual towels check the spread of communicable eye diseases, that teachers should be instructed in simple eye hygiene and should interest their pupils in the same, and that adequate medical inspection and nursing service will accomplish wonders in preventing handicaps.

Mr. McAloney, of Pittsburg, while declaring that the problem of conservation of vision classes is primarily one for the public school, and that such classes should be established in every city or town where there are six or more partially sighted children, claimed that residential schools must take it up when these places failed to do so, or when such children belonged to rural districts. His school is the only one so far equipped with such a class, and he claimed that it had proved a great success, since the child, instead of being held back with those even more handicapped than he, can make use of what sight he has to the best possible advantage.

Two speakers laid great emphasis on the value of dramatics in the education of the blind, and their opinion was endorsed by Mr. Allen, of Perkins. The blind child assumes a listening attitude which often becomes almost the antithesis of the attitude of a seeing child, and if he has a little vision, the effort to see will produce a twist of the face and the head very abnormal, especially as he is cut off from imitation of the movements of others. One of the objects of the teacher of dramatics is to free him from these handicaps and to give his face and body natural grace of expression and movement. But, even more, the interest in and familiarity with the great authors is an invaluable aid in the general culture of the mind. All children love to act, and this natural inclination can be made extremely effective.

Ontario School for the Blind

I.—Attendance each official year since the opening of the School

	Male	Female	Total
Attendance for portion of year ending 30th September, 1872..	20	14	34
" for year ending 30th September, 1873.....	44	24	68
" " " 1874.....	66	46	112
" " " 1875...	89	50	139
" " " 1876.....	84	64	148
" " " 1877.....	76	72	148
" " " 1878.....	91	84	175
" " " 1879.....	100	100	200
" " " 1880.....	105	93	198
" " " 1881.....	103	98	201
" " " 1882.....	94	73	167
" " " 1883.....	88	72	160
" " " 1884.....	71	69	140
" " " 1885.....	86	74	160
" " " 1886.....	93	71	164
" " " 1887.	93	62	155
" " " 1888.....	94	62	156
" " " 1889.....	99	68	167
" " " 1890.....	95	69	164
" " " 1891.....	91	67	158
" " " 1892.....	85	70	155
" " " 1893.....	90	64	154
" " " 1894.....	84	66	150
" " " 1895..	82	68	150
" " " 1896.....	72	69	141
" " " 1897.....	76	73	149
" " " 1898.....	74	73	147
" " " 1899.....	77	71	148
" " " 1900.....	77	67	144
" " " 1901.....	72	66	138
" " " 1902.....	68	70	138
" " " 1903.....	67	64	131
" " " 1904.....	68	66	134
" " " 1905.....	67	74	141
" " " 1906.....	71	76	147
" " " 1907.....	72	72	144
" " " 1908.....	71	68	139
" " " 1909.....	72	70	142
" " 31st October. 1910.....	77	67	144
" " " 1911.....	76	61	137
" " " 1912.....	69	55	124
" " " 1913.....	62	62	124
" " " 1914.....	65	59	124
" " " 1915.....	70	62	132
" " " 1916.....	82	61	143
" " " 1917.....	74	53	127
" " " 1918.....	75	51	126
" " " 1919.....	77	51	128
" " " 1920.....	81	55	136

II.—Age of Pupils for the year ending 31st October, 1920

	No.		No.		No.		No.
Five years	0	Eleven years	6	Seventeen years.	15	Twenty-three years ..	3
Six "	1	Twelve "	13	Eighteen "	6	Twenty-four "	2
Seven "	5	Thirteen "	8	Nineteen "	9	Twenty-five "	0
Eight "	5	Fourteen "	18	Twenty "	2	Over twenty-five years	3
Nine "	5	Fifteen "	7	Twenty-one "	3		
Ten "	9	Sixteen "	14	Twenty-two "	2	Total.....	136

III.—Nationality

—	No.	—	No.
American	1	Indian	3
Austrian	1	Irish	9
Canadian	62	Italian	2
English	35	Polish	5
Finlander	1	Russian	2
French	4	Scotch	7
German	2		
Hebrew	1	Total	136
Icelandic	1		

IV.—Denomination of Parents

—	No.	—	No.
Anglican	36	Methodist	35
Baptist	6	Presbyterian	26
Christadelphian	1	Roman Catholic	24
Christian Science	1	Salvationist	1
Congregational	1		
Hebrew	1	Total	136
Lutheran	4		

V.—Occupation of Parents

—	No.	—	No.
Accountant	1	Manufacturer	1
Barbers	3	Merchants	4
Book-keepers	2	Miller	1
Bricklayer	1	Miner	1
Cabinet-maker	2	Painter	1
Carpenters	5	Pedlar	1
Clergyman	1	Police Magistrate	1
Clerks	4	Policeman	1
Confectioner	1	Railway Employees	3
Craneman	1	Salesmen	2
Dentist	1	Sawyer	1
Electrician	1	Shoemaker	1
Farmers	25	Soldiers	3
Fireman	1	Stove Mounter	1
Foreman	2	Trader	1
Gardeners	3	Traveller	1
Hotel Man	1	Teamsters	2
Hunter	1	Tinsmith	1
Iron Worke	1	Tuner	1
Janitor	1	Weaver	1
Jeweller	1	Unknown	14
Journalist	1		
Labourers	30	Total	136
Machinists	3		

VI.—Cities and Counties from which pupils were received during the official year ending 31st October, 1920

County or City	Male	Female	Total	County or City	Male	Female	Total
County of Addington	1	....	1	County of Oxford	....	1	1
District of Algoma	....	1	1	" Perth	....	1	1
City of Belleville	....	1	1	" Peel	2	1	3
City of Brantford	....	3	3	City of Peterboro	2	1	3
County of Bruce	1	....	1	District of Rainy River	....	1	1
" Frontenac	....	1	1	County of Renfrew	2	....	2
" Glengarry	....	1	1	" Russell	....	2	2
" Grenville	1	....	1	City of St. Thomas	1	....	1
City of Guelph	....	1	1	County of Simcoe	3	....	3
City of Hamilton	1	2	3	City of Toronto	15	8	23
County of Haldimand	2	....	2	District of Thunder Bay	1	....	1
" Haliburton	1	....	1	County of Waterloo	1	....	1
" Huron	3	1	4	" Welland	....	1	1
" Kent	1	....	1	" Wellington	1	....	1
City of Kingston	1	....	1	" Wentworth	1	....	1
County of Lambton	....	1	1	" York	1	1	2
" Leeds	3	1	4	Alberta	4	3	7
City of London	2	1	3	British Columbia	5	2	7
District of Muskoka	1	1	2	Manitoba	13	9	22
District of Nipissing	3	3	6	Saskatchewan	6	3	9
County of Norfolk	....	1	1				
County of Ontario	1	1	2	Total	81	55	136
City of Ottawa	1	1	2				

VII.—Cities and Counties from which pupils were received from the opening of the School until 31st October, 1920

County or City	Male	Female	Total	County or City	Male	Female	Total
County of Addington	1	....	1	County of Haliburton	2	....	2
District of Algoma	10	6	16	" Halton	7	3	10
City of Belleville	4	1	5	City of Hamilton	24	23	47
County of Brant	10	8	18	County of Hastings	6	6	12
City of Brantford	17	14	31	" Huron	15	13	28
County of Bruce	10	12	22	City of Kingston	8	4	12
" Carleton	2	2	4	County of Kent	11	8	19
" Dufferin	2	1	3	" Lambton	20	8	28
" Dundas	3	3	6	" Leeds	17	5	22
" Durham	4	4	8	" Lanark	4	4	8
" Elgin	7	6	13	" Lennox	4	1	5
" Essex	15	22	37	" Lincoln	3	3	6
" Frontenac	5	4	9	City of London	14	11	25
" Glengarry	8	2	10	County of Middlesex	10	13	23
" Grenville	3	2	5	District of Muskoka	4	3	7
" Grey	11	12	23	County of Norfolk	11	10	21
City of Guelph	4	5	9	City of Niagara Falls	....	1	1
County of Haldimand	6	5	11	District of Nipissing	10	8	18

VII.—Cities and Counties from which pupils were received from the opening of the School until 31st October, 1920—Concluded

County or City	Male	Female	Total	County or City	Male	Female	Total
County of Northumberland	6	9	15	County of Stormont	5	2	7
" Ontario	9	14	23	City of Toronto	89	58	147
City of Ottawa	24	7	31	District of Thunder Bay	1	....	1
County of Oxford	8	13	21	County of Victoria	9	2	11
District of Parry Sound	3	....	3	" Waterloo	13	6	19
County of Peel	4	2	6	" Welland	9	6	15
" Perth	5	11	16	" Wellington	11	8	19
" Peterborough	15	7	22	" Wentworth	10	11	21
" Prince Edward	7	2	9	" York	21	17	38
" Prescott	2	2	4	Province of Quebec	5	1	6
" Renfrew	9	6	15	Alberta	9	6	15
" Russell	6	3	9	British Columbia	11	2	13
District of Rainy River	1	1	2	Manitoba	19	16	35
City of St. Catharines	3	2	5	Saskatchewan	11	9	20
" St. Thomas	4	2	6	United States	1	1	2
" Stratford	3	1	4				
County of Simcoe	13	11	24		638	471	1,109

VIII.—Cities and Counties from which pupils were received who were in residence on 31st October, 1920

County or City	Male	Female	Total	County or City	Male	Female	Total
County of Addington	1	....	1	County of Perth	....	1	1
District of Algoma	....	1	1	" Peterboro'	1	1	2
City of Brantford	....	3	3	" Renfrew	2	....	2
County of Bruce	1	....	1	" Russell	....	2	2
" Frontenac	....	1	1	" Simcoe	2	....	2
" Glengarry	....	1	1	City of St. Thomas	1	....	1
" Grenville	1	....	1	" Toronto	10	6	16
City of Hamilton	1	2	3	County of Waterloo	1	....	1
County of Haldimand	2	....	2	" Welland	....	1	1
" Huron	1	1	2	" Wellington	1	....	1
" Kent	1	....	1	" Wentworth	1	....	1
County of Leeds	3	....	3	" York	1	1	2
City of London	2	1	3	Alberta	4	3	7
District of Muskoka	1	....	1	British Columbia	6	2	8
" Nipissing	3	3	6	Manitoba	8	9	17
County of Ontario	1	1	2	Saskatchewan	5	2	7
City of Ottawa	1	1	2				
County of Peel	1	....	1	Totals	63	43	106

MAINTENANCE EXPENDITURE FOR THE YEAR ENDING OCTOBER 31st, 1920, COMPARED WITH THE PREVIOUS YEAR

Service	Expenditure Year ending October 31st, 1919	Expenditure Year ending October 31st, 1920
	$ c.	$ c.
Medicine and Medical Comforts	214 81	307 60
Groceries and Provisions	9,499 99	11,973 49
Bedding Clothing and Shoes	491 38	220 35
Fuel, Light and Power	8,377 58	12,274 26
Laundry Soap and Cleaning	500 84	595 33
Furniture and Furnishings	882 11	1,043 76
Farm and Garden	1,492 58	1,450 11
Repairs and Alterations	2,148 48	1,115 17
Advertising and Printing	771 46	727 10
Books, Apparatus and Appliances	1,643 69	1,114 86
Pupils' Sittings in Churches	200 00	200 00
Y.M.C.A. Memberships	100 00	100 00
Rent of Hydrants	160 00	160 00
Water Supply	543 27	591 72
Inspection of Literary and Musical Classes	200 00	200 00
Oculist—Care of Eyes	252 00	150 00
Dental Inspection—Care of Teeth	212 00	136 00
Musical Instruments, including Typewriters	287 90	663 00
Repairs to Pianos and Organs	66 55	57 31
Hardware, Paints and Oils	646 15	589 44
Workshop—Tools and Material	718 63	1,506 83
Engineer's Supplies	393 13	510 89
Models and Outfits	73 99	169 67
Unenumerated	2,118 28	2,279 56
Salaries	34,487 90	44,864 86
Dictaphone	391 99	.....
	66,874 71	83,001 31

Our Expenditure for the year ending October 31st, 1919	$83,001 31
Returned to the Department in the way of Casual Revenue	12,039 42
Actual cost of maintenance	70,961 98
Average attendance	108
Average per capita cost per year	$657 08

Certified correct,

G. H. RYERSON,
Bursar.

*October 31st, 1920.

APPENDIX Z

ONTARIO SCHOOL FOR THE DEAF

ANNUAL REPORT OF THE SUPERINTENDENT

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to present for your consideration the fiftieth annual report of the Ontario School for the Deaf, and in doing so it is very satisfactory to state that the splendid progressive and humanitarian spirit that made possible the establishment of the school fifty years ago still obtains, as shown by the generous appropriations for the ordinary maintenance of the school and, more especially, by the carrying on by you of the construction of the new modern main building which, when completed, will give us an adequate supply of well appointed up-to-date class-rooms and, when the building programme is finally completed, will give to most of the present and all the future deaf children of our Province a residential school equipment equal to the best in any land.

Fifty Years Ago

The late Mr. J. B. McGann opened the first school for the education of the deaf in this Province in Toronto in 1858. This school he carried on with varying degrees of success and always under great difficulties, first in Toronto and subsequently in Hamilton, until the present school was opened by the Ontario Government on October 20th, 1870, under the superintendency of Dr. Palmer, with a teaching staff consisting of Mr. McGann, Mr. Green, Mr. Coleman, and Mrs. Terrill. Dr. Palmer was superintendent from 1870 to 1879, when he was succeeded by Mr. R. Mathison. Of the original teaching staff of four only two are now living, Mrs. Terrill and Mr. Coleman. Mrs. Terrill, a daughter of the late Mr. McGann, before the opening of this school, assisted her father in the management of his school in Hamilton. She retired from our staff about ten years ago and is now enjoying a well earned rest after having served over forty years the cause of deaf education in Ontario. Mr. Coleman came from North Carolina, where, after going through the United States Civil War, he settled down to teaching the deaf in his native state. Mr. Coleman is still a member of our staff, though he has been recently relieved of most of his active duties. Two more teachers were added to the staff during the first session, Miss Perry and Mr. Watson, a son-in-law of Mr. McGann. Mr. McGann died ten years after the opening of the school, and Mr. Watson, who left the service a short time afterwards and was subsequently superintendent of the Winnipeg School and different schools in the United States, died last year at the home of his son-in-law, Mr. Tillinghast, the superintendent of the Oregon State School for the Deaf. To these pioneers the deaf of Ontario feel a deep sense of gratitude.

The Work of the Session

The work of the session was carried on in twenty-two classes under twenty-three teachers, and good results were obtained. During the session two outbreaks of a mild type of diphtheria occurred, and although none of the pupils were dangerously ill, still the quarantine periods seriously hampered the work of the school. The prevalence of contagious diseases throughout the Province, and particularly in our immediate vicinity, makes it difficult to keep these diseases out of the school.

The Attendance

The average attendance for the session ending June, 1920, was 241 pupils, three less than that of the preceding year. At the close of school in June thirteen pupils were written off and at the reopening in September seventeen pupils did not return. A number of these were detained home through illness, but several were kept home to work, the high wages obtainable at the time being too strong an inducement for the parents to resist. A few of these have since returned, and twenty-eight new pupils have been added to the roll, so that the attendance for the present session will be well up to normal.

Changes in the Staff

At the close of the school session Miss Mary Bull, for thirty-eight years a teacher in our school, retired to take a well-earned rest. Miss Bull was a faithful and efficient teacher and a splendid member of our residential staff. Miss Irene Aherne, who had been five years on our staff, resigned to be married. Miss Aherne was a very capable teacher, and her resignation was a distinct loss to the teaching power of our staff. Mr. Coleman has been placed on the supernumerary list, and, while not in charge of a class, is still a member of our staff. These teachers' places have been filled by the appointment of Miss B. Wilson, formerly principal of the Orono Public School, Miss S. Ward, a well-known teacher of Collingwood and Walkerville, and Miss Bradley, of Newcastle.

The Expenditure

The financial year ending October 31st, 1920, represents the peak in high prices, the result of war and post-war conditions and, under the circumstances, the increase in our expenditure was unavoidable. The economy of the war years, when all but the urgently necessary supplies were cut out, left us short in many lines, and renewals had to be made at a time of very high prices. This makes the increase more marked than if rigid economy had not been exercised in those years, but even now we have only reached an expenditure which similar institutions in Canada and the United States had reached years previous. With the exception of two items the expenditure has increased over that of the previous year less than $5,000, an amount very moderate when the prevailing purchasing power of the dollar is considered. The two items which are responsible for most of our increased expenditure are salaries and wages, and fuel, light and power. In the first of these, salaries and wages, our staff had been for years on a wage scale very much below that obtainable in other fields of work for similar services, and it was necessary, if the efficiency of the staff was to be kept up, that their salaries should be adequate for the services rendered. During the year what was known as "perquisites" was done away with, and nearly all members of the staff receiving "perquisites"—free houses, board, etc.—were charged for the same at prices set by the Civil Service Commissioner

and, as these items or "perquisites" had always been part of the salaries, an amount equal to the charge of "perquisites" was added to the salary. The sum thus collected and returned to the Provincial Treasurer was $6,154.38. This amount, which in reality is only a cross entry, must in all fairness be deducted from the total increase in salaries and wages. The increase in the item of fuel, light and power was from a number of causes, the chief of which was the extraordinary condition prevailing during the year. The shortage of coal and the difficulties of transportation made it absolutely essential that a supply sufficient to carry us over the winter months be provided. Coal dealers refused to make contracts owing to the unsettled conditions and the existing high prices and the only alternative was to purchase on a commission basis. This was done to ensure a supply, but the price paid for slack coal was nearly double that of last year and nearly four times the price of 1913. Other factors which enhanced the cost were an unusually severe winter, the poor quality of the coal obtainable, and the difficulty of procuring competent help in our boiler room, and, in addition to these, the contractor for 1919 was unable to deliver all the coal contracted for during the financial year, and a great part was delivered and paid for out of the 1920 appropriation, thus making an extra load on the appropriation for 1920. Under these circumstances no other result than that this item would be abnormal for the year could be expected. Now that the time has come that the peak of high prices has been passed and declining prices are the rule, we can confidently look forward, so far as the purchasing of supplies is concerned, to a reduced expenditure.

Appended hereto are the reports of Dr. Boyce, the attending physician, and Mr. H. J. Clarke, B.A., the inspector of the literary work of the school.

Before closing this report, I wish to thank you, Mr. Grant, and your Deputy Minister, Dr. Colquhoun, for your unfailing courtesy and assistance during the year and also to express my appreciation of the splendid loyalty and faithful work of the officers and teachers of the staff.

I have the honour to be,

Sir,

Your obedient servant,

C. B. COUGHLIN,
Superintendent.

Belleville, November 1st, 1920.

LITERARY EXAMINER'S REPORT

HONOURABLE R. H. GRANT,
Minister of Education for Ontario.

DEAR SIR,—I have the honour to present for your consideration my report on my inspection of the School for the Deaf at Belleville.

In accordance with your instructions, I have conducted an inspection of the literary classes at the Ontario School for the Deaf; I also spent some time among the trades.

This school is really two schools under one head, constituted as follows: (1) The Manual Department of five classes under the supervision of Miss Linn, who also teaches the highest grade in this Department; and (2) the Oral Department, which is by far the larger proportion of the school and is subdivided into Junior Oral under the supervision of Miss Ford, and Senior Oral under the supervision of Mr. Campbell. Mr. Campbell also teaches the senior class in this department. Miss Ford, the supervisor of the Junior Orals has had expert training for this work at Northampton.

While every effort is made to select the very best teachers available from the Public Schools of the Province, for this work, from the nature of things the Normal Schools can give no special training in teaching the deaf, consequently the teachers, however expert they may be in the ordinary school, require special training for this work, and this expert training devolves upon Miss Ford.

I spent six days in the Literary Classes, visiting every class except one. Miss Brown was ill during my visit.

The course of study is based largely upon that of the Public School, with, of course, such modifications as are necessary with these children, where language has to be stressed far more than in a speaking school, or rather a hearing school, for this is very largely a "speaking school." The great handicap of the deaf is the lack of language. They come to school in most cases without any knowledge of language. They have the natural signs, with which to express some of their ideas, but without any knowledge of language proper. It takes years of careful training to give them the command of language that a hearing child would have acquired before entering school, and that without apparent effort. From this it is readily seen that the Public School Course of Study must be remodelled so that every subject will offer the maximum of training in language. It is surprising what is accomplished, and in order to assist the parents to keep up the language of their children during the long vacation, each child takes home with him, in a neatly prepared booklet, the work he has covered during the year. This will enable the parent who is sufficiently interested in his child's progress to keep up his language so that the child may return to school ready to go right on where he left off. The pupils in the Oral Department are able to speak and recognize all the words that appear in these booklets, and a little care on the part of the parent will greatly assist the child in his effort to acquire the ability to communicate with speaking people, by speech and lip-reading.

I do not consider it necessary to give a minute account of what I observed in the several classes, but if this is required, it can be supplied, and the results of the final examinations are on file in the Superintendent's office. Suffice it to say that in almost every class I would grade the work of a high order of proficiency. I was particularly struck with the improvement in the ability of the several pupils to take conversation from the lips. This being the thirteenth inspection that I have made, I am beginning to feel that I am in a position to judge of this work with some measure of authority, and I know that great progress has been made this year in the Oral Department. The Manual Department has not been able to make so great an improvement, consisting as it does of pupils who either entered very late in life, or who from defective sight or otherwise could not profitably be handled in an oral class. Every effort is made to give oral instruction where it is possible. In fact, it is a question whether there are not some now in oral classes that are unable to measure up to the requirements. However, they are given the chance, for the child who leaves the school with the ability to read the lips with

some freedom has an immense advantage over one who cannot do so. The matter of speaking, while it is greatly to be desired, is of less importance than the ability to read the lips. I might say, however, that I have little trouble to follow the speech of these oral pupils. Another point that is very noticeable is the improvement in the use of language since I first inspected here. The "deafisms" so noticeable at that time in their written compositions is rapidly disappearing, and while they still make mistakes, they are far less frequent and can readily be accounted for. Should your official duties permit you to visit this school, you will at once be struck with the character of the handwriting and spelling even in the junior grades. Depending as they do so largely on sight, these children attain a proficiency in these subjects that well might be the envy of some hearing schools. Speaking generally, I might say that all the subjects of the Public School Course are receiving satisfactory attention except Art.

After completing my inspection of the purely literary classes, I spent some time visiting the "shops." The instruction given in the various trades is, I believe, good, and every effort is made to impart the language peculiar to the trade in question. These trade instructors have an opportunity of teaching this particular language that is not possible in the regular literary teacher. There is a great temptation to "sign" the instructions to these boys, rather than take the time to commit the instructions to written or spoken language, but following out the idea that language is of the first importance to these children, the instructors are urged to make every lesson one in language. Should you again entrust me with this work, I shall look forward to noting the progress that has been made in this department.

Due to the care that is taken to safeguard these children, they have been remarkably free from contagious disease. While surrounding schools have been seriously interrupted by disease of various kinds, this school has practically escaped.

I note with pleasure the progress that is being made on the new school building, which, from the blue prints shown to me, will be a thoroughly modern structure. A visit to the present class-rooms would convince anyone familiar with school requirements that the expenditure on this new school is amply justified. It speaks well for the staff that so much has been accomplished, considering the conditions under which they have laboured.

Some changes have been made in the teaching staff during the year. As these appear in the official paper published by the school, it is not necessary to go into details here. I may say, however, that I observed the new members of the staff somewhat closely, and it is my opinion that they will be a source of strength to the already strong teaching staff.

In closing, I wish to thank the Superintendent and officers of the school for the many kindnesses shown to me during the discharge of my official duties. Every opportunity was given to me to see things as they are, and I am pleased to certify that I believe that the institution is in most capable hands.

I have the honour to be,

Sir,

Your obedient servant,

H. J. Clarke,
Public School Inspector,
South Hastings, Belleville and Trenton.

Belleville, July 24th, 1920.

PHYSICIAN'S REPORT

To the Honourable R. H. Grant, M.P.P.,

Minister of Education for Ontario.

Sir,—I beg to submit my report on the health of the children and attendants of the Ontario School for the Deaf for the past year. Before mentioning especially the work of the past session in this department, I deem it proper to review in a general way the routine we have established and which we endeavour to adhere to as closely as we can with the view of preventing as far as possible the inroads of infections, detecting of insidious disease and placing under observation and treatment any suffering from physical defects or constitutional disabilities.

The opening of every session is a pretty busy time and attended with considerable anxiety, particularly so during the past few years when epidemics have been so prevalent throughout the Province. The children coming from various parts of the country and from localities and homes where epidemics prevail, and often where the sanitary conditions are not what they should be, often become the carriers of infections which, if introduced into a school with some two hundred and fifty children of a susceptible age, would cause a great amount of sickness, loss of school attendance, and general disorganization of the work. To prevent such a misfortune, the Superintendent has caused to be sent out to the homes of every prospective pupil a printed slip with full details regarding the measures to be adopted to prevent such an occurrence, instructing them as to the personal attention to the children, the proper fumigation of their clothing, trunks, etc. On arrival at the school the first duty is to at once inspect all the children, and wherever any suspicious case is observed it is quarantined and placed under observation. The trunks and clothes are also closely inspected, and if it seems that the proper precautions have not been taken they are again fumigated. Thereafter, everything coming into the school from the homes of the children is disinfected before it reaches the child; all parcels of mail, including letters, etc., go through the same fumigating process. Articles of food only are excepted, and we feel that it would be to the welfare of the school if this could be eliminated.

As soon as possible after the children have assembled a personal examination is made of all those here for the first time. Any disability or constitutional disorder is noted, the child being placed under treatment, and if the condition is permanent we endeavour by special attention to keep him at school. Then the entire school is examined and treatment assigned to those requiring it. The children are weighed and their height taken and a record kept for future reference, and at the close of the school in the summer the height and weight are again taken before they return home. During the whole school term a monthly inspection is made of all the children. It is characteristic of the thoroughness of the Superintendent that no effort is spared when the health of the children is at stake. He considers the health of the children paramount, not only because of their physical welfare, but because the best class-room work is only to be obtained by keeping the health of the children good.

The past session has been an eventful one. Smallpox prevailed very generally throughout the Province, and early in the session instructions were issued forbidding the children going into the town unless on urgent matters, and then for-

bidding them mingling with crowds or visiting crowded places. The same instructions were given the staff and teachers, and we believe these instructions were carefully adhered to. To the public, the school and grounds were quarantined. As a further precautionary measure the whole school was vaccinated, even those who had been previously vaccinated unless it was of very recent date. With some of the children this prevented attendance at school for a time, but no bad results followed. It entailed a great deal of work and careful attention, but we believe the results justified it because we had no case of smallpox.

In December, 1919, a case of diphtheria broke out which was unquestionably due to a "carrier" in the school. There had been no complaints of any throat trouble and the general health of the school was very good. Immediately after this case was detected, all the children of the same class-room were given preventive inoculations of serum, but this did not stop the spread, and we then inoculated the whole school. Swabs were taken from the throats of all the children, also teachers and attendants, for laboratory examination, and wherever the report was positive of the germ the patient was quarantined in a suspect ward, put under treatment, and kept there until three negative swabs were returned. During the period from December to May we had thirty-nine cases of diphtheria. Repeated inoculations were made during that time as circumstances seemed necessary, and some time previous to the children returning home in June they were all again inoculated. All the trunks and clothing were again fumigated and notices sent to the various homes advising of the conditions and recommending prompt action should any suspicious symptoms arise. No child was allowed to return home until three negative swabs were made of throat secretions. We had no mortality from diphtheria. With the exception of the epidemic, the sickness in the school has not been exceptional from other years. We had a good many cases of influenza of a somewhat mild form, also bronchitis. Of quite common occurrence is anaemia and general debility, also digestive disorders, middle ear trouble, skin diseases and accidents of a minor character. Of the more severe cases, I would especially mention two cases of heart disease, two cases of appendicitis, one operated on with recovery and the other returned home, two cases of inflammatory rheumatism, one fracture of arm, and one case, an attendant, Eva Lindsay, of contused wound accompanied with scalding of the hand which necessitated amputation of all the hand excepting the thumb and part of forefinger, five cases of tonsilitis, two cases of severe abscess and one case of convulsions. The health of the staff and attendants has been fair.

After the close of school in June the task of renovating the buildings, with their contents, was undertaken, and considerable time and attention given to this during the holiday season with the view of removing any danger of subsequent infection and making the place safe for the reopening of school. The hospital has been disinfected and fumigated throughout, the mattresses and bedding fumigated, the beds washed with antiseptic solution. The dormitories, with the beds and bedding and all movable articles, have been carefully disinfected either by washing with antiseptic solution or by fumigation. The basement and store rooms were freshly whitewashed. In the main building, the dining-room, kitchen and class-rooms were treated the same, and very special attention given to the school books and other articles used by the children. The engine room, store rooms and work rooms have also been freshly coated with lime. The main building is obsolete

and somewhat dilapidated, and although everything has been done to make it healthful that we could do, one can never be very sure of it, and the early completion of the new building now under construction is much to be desired.

I have the honour to be,

Sir,

Your obedient servant,

W. W. Boyce.

Belleville, November 1st, 1920.

Officers of the School

C. B. Coughlin, M.D.	Superintendent.
J. W. Pearce	Bursar.
W. W. Boyce, M.D.	Physician.
Miss E. A. Willoughby	Matron.
Miss A. B. Schofield	Domestic Science Teacher. and Assistant Matron.

Teachers

Manual

Miss G. Linn, Supervising Teacher, Manual Department.
D. R. Coleman, M.A.
Mrs. Sylvia C. Balis.
Miss Ada James.
Miss Nina Brown.

Oral

W. J. Campbell, Supervising Teacher, Senior Oral Department.
Miss C. Ford, Supervising Teacher, Junior Oral Department.
Geo. F. Stewart.
Miss L. Deannard.
Miss I. B. Palen.
Miss B. Rierdon.
Miss E. Panter, B.A.
Miss F. Curry.
Miss L. Carroll.
Miss V. Hanley.
Miss G. Springer.
Miss E. Nurse.
Miss H. A. Stirk.
Miss B. Sunter.
Miss I. G. Malcolm.
Miss K. B. Scott.
Miss S. E. Ward.
Miss B. A. Wilson.
Miss G. Bradley.

Miss A. B. Schofield	Domestic Science Teacher.
Miss C. Coombe	Trained Nurse.
Mrs. L. G. Williams	Teacher of Sewing.
Miss I. McBride	Clerk and Stenographer.
Wm. Nurse	Storekeeper and Assistant Supervisor of Boys.
Wilfred Smith	Supervisor of Boys.
A. Morrice	Shoemaker and Instructor in Shoemaking.
M. W. Parks	Carpenter and Instructor in Carpentering.
J. N. Boyd	Baker and Instructor in Baking.

List of Pupils in the Ontario School for the Deaf for the Year Ending October 31, 1920.

County, etc.	P.O. Address.
Algoma District:	
Donovan, Ellen	Sault Ste. Marie.
Webb, Kathleen	Dayton.
Alberta, Province of:	
Nouak, Nick	Didsbury.
Brant:	
Black, Nellie	Newport.
Moors, Beatrice	St. George.
Moors, Grace	St. George.
McKenzie, Robert	Harley.
Reid, James	Brantford.
Tate, Mary	Harley.
Bruce:	
Crowe, Robert	Dobbinton.
McKee, Carl	Pinkerton.
McKee, Maud	Pinkerton.
Rourke, Melville	Tara.
Thompson, Robert	Lucknow.
Carleton:	
Blanchard, Victor	Cumming's Bridge
Carriere, Joseph	Ottawa.
Delinelle, Lauretta	Ottawa.
Garvin, Jean	Ottawa.
Hanna, Abraham	Ottawa.
Jones, Mabel	Billing's Bridge.
Little, Sadie	Ottawa.
Pittaway, Audrey	Ottawa.
Quinn, Carman	Ottawa.
Radmore, Frank	Ottawa.
Savard, Paul	Ottawa.
Simpson, Ian	Ottawa.
Towns, Dora	Laurentian View.
Dufferin:	
Boyle, Lizzie	Waldemar.
Boyle, John	Waldemar.
Middleton, Helen	Shelburne.
Smith, Gordon	Riverview.
Sherritt, Susie	Corbetton.
Essex:	
Andrews, Kenneth	Windsor.
Fairful, Maisie	Leamington.
Standish, Dorothy	Essex.
Suddy, Fred	Windsor.
Elgin:	
Eames, Carl	St. Thomas.
Gwalter, Fred	St. Thomas.
Gwalter, Kathleen	St. Thomas.
Fawcett, George	West Lorne.
Lawrence, Jean	St. Thomas.
Stoner, Irene	St. Thomas.
Wonnacott, Nellie	Aylmer.
Frontenac:	
Charlton, Archie	Kingston.
Godfrey, Delpha	Mountain Grove.
Gilmour, Maud	Kingston.
Smith, Marie	Kingston.
Wood, Alonzo	Cataraqui.
Grey:	
Henderson, Harvey	Owen Sound.
Kinsman, Mary	Proton.
Snell, Ruby	Durham.
Haldimand:	
Foster, Dorothy	Dunnville.
Foster, Sylvia	Dunnville.
Foster, Irene	Dunnville.
Maw, Harris	Caledonia.
Halton:	
Kenney, Francis	Acton.
Patterson, Walter	Milton.
Patterson, Lewis	Milton.
Hastings:	
Guy, Lawrence	Belleville.
Ingram, Nellie	Faraday.
Liddle, Pearl	Shannonville.
Partrick, Margaret	Trenton.
Roberts, John H.	Belleville.
Shaw, Vera	Trenton.
Schwager, Albert	Thomasburg.
Waldron, Arthur	Trenton.
Whalen, Mary A.	Point Anne.
Yerrow, Bruce	Belleville.
Huron:	
Bell, Elwood	Goderich.
Cole, Jean	Clinton.
Cole, Melvin	Clinton.
Laporte, Dennis	Zurich.
Marshall, Russell	Hensall.
Kenora, District of:	
McMillan, Hugh	Kenora.
Kent:	
Antaya, Roy	Paincourt.
Brewer, Blanche	Bothwell.
Christian, Gertrude	Wallaceburg.
Dubois, Madeline	Wallaceburg.
Goodison, Ada	Coatsworth.
Healey, Dorothy	Wheatley.
Julien, Joseph	Wheatley.
Toulouse, John	Chatham.
Roberts, John E.	Thamesville.
Rechie, Agnes	Chatham.
Rechie, Napoleon	Chatham.
Lambton:	
Batty, Blanche	Sarnia.
Johnston, Olive	Sarnia.
Jackson, Myrel	Oil Springs.
Jackson, Leone	Oil Springs.
Henderson, Gordon	Sarnia.
Leckie, Alice	Sarnia.
McMillen, Douglas	Sarnia.
Pembleton, Anna	Forest.
Volk, Mildred	Thedford.

List of Pupils in the Ontario School for the Deaf.—Continued.

County, etc.	P.O. Address.
Lanark:	
Dart, Grace	Smith's Falls.
Rathwell, Charles	Perth.
Wenzel, Doris	Lanark.
Lincoln:	
McMillan, Duncan	St. Catharines.
Thornton, Lloyd	Vineland Station.
Watson, Bert	St. Catharines.
Leeds:	
Bishop, Ethel	Gananoque.
Davis, Jay	Brockville.
Middlesex:	
Bradshaw, Carl	London.
Eager, Mary	London.
Garside, Florence	London.
Hodgins, Sadie	London.
Hodgins, Albert	London.
Hutchinson, Wm.	London.
McMurray, Mirton	Belton.
Summers, Moses	Muncey.
Muskoka District:	
Franklin, Elmer	Bala.
Johnston, Ella	Utterson.
Nipissing District:	
Anderson, Julia	North Bay.
Norfolk:	
Davis, Florence	Simcoe.
Krick, William	Vanessa.
Krick, Norman	Vanessa.
Oxford:	
Groves, Russell	Ingersoll.
Miller, Willie	Tavistock.
Wagester, Walter	Tavistock.
Youngs, Cylene	Embro.
Ontario:	
Ballagh, Edith	Whitby.
Gura, Nicky	Oshawa.
Lappin, Leo	Atherley.
Luke, Elsie	Brooklin.
Maynard, John	Uxbridge.
Scott, Walter	Sunderland.
Toyne, Nellie	Pickering.
Wilton, Lesley	Claremont.
Prince Edward:	
Harris, Mary	Picton.
Perth:	
Eickemeyer, Norman	Monkton.
Kaulman, Margaret	Palmerston.
Parry Sound District:	
Bagby, Florence	Burk's Falls.
Windsor, George	Callander.
Young, Edna	Trout Creek.
Peel:	
Davey, John	Brampton.
Elliott, Madeline	Bolton.
McVean, Archie	Malton.
Peterborough:	
Farrance, James	Peterborough.
Gerow, Estella	Peterborough.
Meyett, Joseph	Peterborough.
Meyett, Charles	Peterborough.
Meyett, Frances	Peterborough.
McMillan, Ena	Havelock.
Richardson, Herbert Keene.	
Prescott:	
Gwynne, Stuart	Hawkesbury.
Quebec, Province of:	
Joyce, Andrew	Quyon.
Pye, Rodger	Windsor.
Renfrew:	
Coules, Michael	Renfrew.
Dick, Alton	Renfrew.
Hunter, George	Renfrew.
Hunter, Raymond	Renfrew.
Hunter, Clifford	Renfrew.
Jette, Lemay	Pembroke.
Schneider, Milton	Pembroke.
Teepel, Emma	Khartum.
Scully, Mamie	Ashdod.
Rainy River District:	
Olson, Alma	Shenston.
Simpson, Norine	Rainy River.
Simpson, Zona	Rainy River.
Simcoe:	
Bowen, Roy	Cookstown.
Bowen, Esther	Cookstown.
Bowen, Margaret	Cookstown.
Green, Jean	Orillia.
Rivet, Douglas	Midland.
Powell, Harold	Lisle.
Sloan, Harry	Lefroy.
Sloan, Wallace	Lefroy.
Tudhope, Catherine	Orillia.
Wheat, Dorothy	Midland.
Wright, Elsie	Midland.
Stormont:	
Benedict, Rose	Cornwall.
Campbell, Mary	Avonmore.
Ingle, Agnes	Cornwall.
Sudbury District:	
Bealer, Frank	Copper Cliff.
Legrandeur, Victor	St. Charles.
Martel, Joseph	Sudbury.
Toppazzini, Albert	Copper Cliff.

List of Pupils in the Ontario School for the Deaf.—Continued

County, etc.	P.O. Address.
Thunder Bay District:	
Graziano, Joseph	Port Arthur.
Munro, Ada	Slate River.
Smith, Walter	Fort William.
Thompson, Jean	Fort William.
Timiskaming District:	
Audet, Alcide	Cobalt.
Barnes, Ada	Haileybury.
Brent, Margaret	Iroquois Falls.
McConnell, Mildred	Charlton.
Whalen, Loretta	New Liskeard.
Whalen, Mary	New Liskeard.
Victoria:	
Brandon, William	Kinmount.
McNish, Helen	Kirkfield.
Patrick, Nellie	Lindsay.
Wellington:	
Barbour, Clifford	Hillsburgh.
Chambers, Pearl	Rockwood.
Johnston, Viola	Drayton.
Wentworth:	
Allen, Muriel	Hamilton.
Armes, Dennis	Hamilton.
Bluestein, Shina	Hamilton.
Cooper, Martha	Dundas.
Gorman, Walter	Hamilton.
Dennis, Harry	Hamilton.
Hacking, Willie	Hamilton.
Holt, Nathan	Hamilton.
Moreland, Jack	Hamilton.
Murtell, Cecil	Hamilton.
Peel, Douglas	Hamilton.
Tait, William	Hamilton.
Webb, Gordon	Hamilton.
Welland:	
Caswell, Sylvia	Niagara Falls.
Farr, James	Marshville.
Waterloo:	
Crosson, Jack	Galt.
Durrant, Evelyn	Breslau.
Gartung, Gertrude	Kitchener.
Hirons, George	Waterloo.
Jantzi, Amanda	St. Agatha.
Klinkman, Mary	New Hamburg.
Kube, Laura	Kitchener.
Maule, Rona	Galt.
Voisin, John	St. Clemens.
Wagler, Elmina	Baden.
York:	
Angus, Jack	Toronto.
Allen, Winnie	Toronto.
Blais, Gladys	Toronto.
Baillie, Dorothy	Toronto.
Brooks, James	Toronto.
Buchan, Lucy	Toronto.
Buchan, Caroline	Toronto.
Bennett, Charles	Toronto.
Brown, Leonard	Toronto.
Buckle, Oscar	Aurora.
Clark, Gladys	Toronto.
Daniels, Walter	Toronto.
Dickson, Violet	Toronto.
Davey, Charles	Toronto.
Dine, George	Toronto.
Ducker, Freida	Mount Dennis.
Egginton, Maud	Markham.
Egginton, Gwendoline	Markham.
Ford, Raymond	Toronto.
Goulding, Tom	Toronto.
Goldman, Joe	Toronto.
Glasner, Morris	Toronto.
Glennie, Alexander	Toronto.
Herman, Jack	Toronto.
Kelcey, Lillian	Toronto.
Leeder, Flora	Toronto.
Lee, Charles	Toronto.
Laforte, Augustine	Toronto.
Laforte, Isabella	Toronto.
Laughlin, Nellie	Toronto.
Maiola, Lorenzo	Toronto.
Malinsky, Rosie	Toronto.
Malinsky, Louis	Toronto.
McGovern, Willie	Toronto.
McGovern, Elizabeth	Toronto.
McCallum, Duncan	King.
Osborne, Iona	Sutton West.
Petch, Lera	Millikens.
Peirce, Frank	Toronto.
Pack, Sydney	Mount Dennis.
Proctor, Leslie	Toronto.
Roach, Lawrence	Toronto.
Reading, Victor	Toronto.
Robinson, Charles	Toronto.
Roberts, Florence	Toronto.
Richardson, Gordon	Toronto.
Stothers, Alva	Toronto.
Sole, Erna	Toronto.
Smith, Norma	Toronto.
Storks, Doreen	Toronto.
Shidlowsky, Abie	Toronto.
Tate, James	Toronto.
Tweedie, Lorena	Toronto.
Tettman, Gladys	Toronto.
Wall, Nettie	Toronto.
Wall, Sidney	Toronto.
Willmott, Charles	Toronto.
Wraight, Lucy	Toronto.
Wicks, Jack	Toronto.

Number of Pupils in Attendance each Official Year since the Opening of the School

	Male	Female	Total
From October 27th, 1870, to September 30th, 1871.....	64	36	100
" " 1st, 1871, " 1872.....	97	52	149
" " 1872, " 1873.....	130	63	193
" " 1873, " 1874.....	145	76	221
" " 1874, " 1875.....	155	83	238
" " 1875, " 1876.....	160	96	256
" " 1876, " 1877.....	167	104	271
" " 1877, " 1878.....	166	111	277
" " 1878, " 1879.....	164	105	269
" " 1879, " 1880.....	162	119	281
" " 1880, " 1881.....	164	132	296
" " 1881, " 1882.....	165	138	303
" " 1882, " 1883.....	158	135	293
" " 1883, " 1884.....	156	130	286
" " 1884, " 1885.....	168	116	284
" " 1885, " 1886.....	161	112	273
" " 1886, " 1887.....	151	113	264
" " 1887, " 1888.....	156	109	265
" " 1888, " 1889.....	153	121	274
" " 1889, " 1890.....	159	132	291
" " 1890, " 1891.....	166	130	296
" " 1891, " 1892.....	158	127	285
" " 1892, " 1893.....	162	136	298
" " 1893, " 1894.....	158	137	295
" " 1894, " 1895.....	160	135	295
" " 1895, " 1896.....	173	137	310
" " 1896, " 1897.....	164	128	292
" " 1897, " 1898.....	167	138	305
" " 1898, " 1899.....	161	132	293
" " 1899, " 1900.....	153	130	283
" " 1900, " 1901.....	157	143	300
" " 1901, " 1902.....	147	141	288
" " 1902, " 1903.....	140	143	283
" " 1903, " 1904.....	137	134	271
" " 1904, " 1905.....	130	138	268
" " 1905, " 1906.....	116	143	259
" " 1906, " 1907.....	126	145	271
" " 1907, " 1908.....	133	143	276
" " 1908, to October 31st, 1909.....	130	151	281
" November 1st, 1909, " 1910.....	143	149	292
" " 1910, " 1911.....	138	143	281
" " 1911, " 1912.....	135	126	261
" " 1912, " 1913.....	139	129	268
" " 1913, " 1914.....	152	144	296
" " 1914, " 1915.....	156	160	316
" " 1915, " 1916.....	158	152	310
" " 1916, " 1917.....	145	148	293
" " 1917, " 1918.....	143	147	290
" " 1918, " 1919.....	137	140	277
" " 1919, " 1920.....	143	134	277

Cost per Pupil, School for the Deaf, Years ending October 31st, 1919 and 1920

Heading of Expenditure	1918-19			1919-20		
	Total expenditure year ending October 31st, 1919	Yearly cost per pupil October 31st, 1919	Weekly cost per pupil October 31st, 1919	Total expenditure year ending October 31st, 1920	Yearly cost per pupil October 31st, 1920	Weekly cost per pupil October 31st, 1920
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Medical department	335 85	1 38	03	371 89	1 54	03
Butchers' meat, etc	6,391 41	26 19	50	7,266 17	30 15	58
Flour, bread, etc	2,921 98	11 98	23	2,420 00	10 04	19
Butter and milk	6,287 17	25 77	49	8,925 20	37 05	71
General groceries	3,839 59	15 74	30	4,457 13	18 49	36
Fruits and vegetables	1,539 65	6 31	12	1,909 20	7 92	15
Bedding and clothing	1,526 30	6 26	12	341 88	1 42	03
Fuel, Light and Power	17,387 03	71 26	1 37	32,896 63	136 50	2 63
Laundry, etc	1,208 29	4 95	10	1,757 01	7 29	14
Books and apparatus	1,183 99	4 85	10	1,425 62	5 95	11
Printing, etc	842 81	3 45	06	882 98	3 65	07
Furniture, etc	996 70	4 09	08	1,082 11	4 49	09
Repairs, ordinary	1,286 35	5 27	10	1,916 60	7 95	15
Farm	188 36	77	02	.....	.....	.....
Water	900 00	3 69	07	900 00	3 74	07
Sewage	162 00	66	01	312 73	1 29	02
Miscellaneous	1,573 72	6 45	12	2,081 87	8 64	17
Salaries and Wages	45,569 11	186 76	3 59	61,489 71	255 14	4 91
Railway Fares of Pupils, Lumber for Seats, Hardware, etc., Supplies for Boiler Room	1,737 82	7 12	14	1,784 63	7 41	14

Average number of pupils, 1918-19, 244.
Annual cost per pupil, 1918-19, $392.95.
Weekly cost per pupil, 1918-19, $7.55.

Average number of pupils, 1919-20, 241.
Annual cost per pupil, 1919-20, $548.67.
Weekly cost per pupil, 1919-20, $10.55.

Certified Correct,

J. W. Pearce,
Bursar.

PENETANGUISHENE

THIRTY-SECOND ANNUAL

Archæological Report

1920

By Dr. R. B. ORR

BEING PART OF

Appendix to the Report of the Minister of Education Ontario

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
Printed and Published by CLARKSON W. JAMES, Printer to the King's Most Excellent Majesty
1920

Printed by
THE RYERSON PRESS.

PRESENTATION

To the Honourable R. H. Grant, M.A.,

Minister of Education for Ontario.

Sir,—I have much pleasure in presenting to you the thirty-second Annual Archæological Report issued from the Ontario Provincial Museum. The work done in all the Departments during the year has been very satisfactory.

I have the honour to be,

Sir,

Your obedient servant,

Rowland B. Orr.

Toronto, December 30th, 1920.

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To delineate the various phases of culture and civilization through which mankind have successively passed during their long career on the globe, prior to historic times, is the main object of scientific archæology. The materials on which such an inquiry is founded consist of a number of objects showing evidence of human workmanship, either incidentally picked up along the haunts and byways of our primeval ancestors, or purposely searched for among the debris of their inhabited sites and sepulchres. For the correct interpretation of such remains archæologists not only made use of the ordinary synthetical and analytic methods of research, but also cull from collateral sources whatever ascertained truths may be serviceable to their cause. Indeed, so wide and diversified is the field to which the archæological vision must extend that the investigator is constantly obliged to appeal to outside experts to assist in clearing up doubtful points.

"Archæology and False Antiquities": Robert Munro.

Primitive Beliefs and Superstitions of the Hurons and Algonquins

INTRODUCTION.

In his valuable contribution to the *Revue Scientifique,* Paris, M. Solomon Reinich, the learned ethnologist, informs us that, "savage man was and is everywhere and in all ages a religious man. *Religiosity* is the most essential of his attributes, and this we assert notwithstanding that some ethnologists contend that quaternary man was an atheist." M. Reinich belongs to the school which denies all revelation from God to man. It is a remarkable admission from an eminent ethnologist who contends that "the origin of religion must be sought for in the psychology of man furthest removed from civilization." But why hark back to the quaternary age in quest of the "religiosity" of early man? Savage man everywhere and in every age is, without any exception, the same, for he is human, and, given the same conditions, his life and habits are unchanged from age to age.

This being a truism, we are not constrained to rummage through piles of ancient documents in the archæological departments of European libraries, study the specimens of the craft of early savage man in our great museums, or examine the rude paintings of paleolithic man in ancient caverns for the religiosity of the oldest inhabitants of Europe. If we admit that man existed in the quaternary age and that he made his appearance in Europe at a much later period, then we are driven to acknowledge that Europe was not, as M. Dufour contends in his latest work, "L'Origine de l'Homme," the cradle of the human race.

Masters of ethnology, who have devoted a life time of research into the migration of early tribes, are almost unanimous in their admissions that the migrations into Europe were from the east and the south. The first men who peopled France entered from Italy—flying probably from their enemies—and the proto-inhabitants of Italy crossed over from Northern Africa, to which land they migrated from Arabia.

European geologists have conclusively shown that a great land bridge united, in prehistoric times, Europe and Africa and that human beings and animals passed over this bridge from one continent to the other. It is now proved almost to a finality that a great causeway, perhaps a continent, united West Africa to America, and that across this causeway travelled, by easy stages, perhaps thousands of years, the ancestors of all the men and animals inhabiting America, at the time of its discovery by the Spaniards. This migration occurred long before Europe was entered by man. The American Indian is therefore much older, racially and ethnically, than the primitive inhabitants of Europe.

As we advance in our studies of the American savage of the paleolithic age, we are confronted with examples of his psychological attitude toward the natural and preternatural more overwhelmingly convincing, as regards the spiritual and mental state of early savage man, than any specimens of drawings and artifacts found in the caves of the Ardennes, France, or any of the exhibits in the archæological departments of the great museums of Europe.

At best the European tableau is incomplete, while here in America we have living examples of the gradual decay of civilization, beginning with the Toltecs, the Aztecs, the Quiches and the Mayas of Mexico, Yucatan and Chiapas, ending in the bed rock savagery of the Lower Californian "Digger Indians," when the Spaniard Ottondo failed to establish a colony in the arid land. We may also observe that the Troglodytes, who crouched in the grottoes or caves of Vézére and Cantabriques, were not anthropophagi or cannibals, at least we have no proofs or examples to show that they were, whereas cannibalism was practised among all the American tribes east of the Rocky Mountains. Many of these tribes had descended to the lowest depths of savagery.*

If, therefore, we wish to ascertain the *religiosity* of primitive savage man we are not driven to go beyond the boundaries of our Dominion in our search for the religious beliefs and superstitions; or for examples of profligacy and cruelty unsurpassed in any age of the world. We repeat that savage man in every land is the same, and that to know his thoughts, his superstitions, and his life, we need not go outside of our own country, to consult piles of archæological documents in foreign libraries, or *les parois des cavernes* in France and Spain.

What, then, was the *religiosity* of the Canadian Indian when Cartier first sailed up the St. Lawrence in 1535? While mystery shrouds the religion of savage man of the quaternary age, there is no uncertainty associated with the religious attitude of the Canadian savage. His term of existence on the American continent embraced the paleolithic and neolithic ages, and his habits, ways of living, and his religious conceptions and acts were those of early man in Europe and Africa and the islands of the Pacific.

Animism.

Among the Canadian Indians, as among all savages, there was a mental attitude, face to face with nature and its wonders, which is included in the all embracing word *animism*. Animism is a word so elusive that it escapes a definition. It demands an explanation sufficiently comprehensive to include dreams, fetichism, totemism, spiritism, and shamanism.

Professor Zwemer, in his latest book, "The Influence of Animism on Islam," defines animism as: "The belief that a great part, if not all, of the inanimate kingdom of nature, as well as all animated beings, is endowed with reason, intelligence and volition identical with man." If we accept Zwemer's definition as conclusive, then animism is not a religion or a clearly defined system of belief, but an attitude of the mind, face to face with nature, just as pragmatism is an attitude of the mind towards the problem of natural philosophy.

Burnett Taylor in his book, "Primitive Culture," asserts that animism is a primitive philosophy. In his interesting volume which appeared in 1871, and was hailed by his admirers as "The Gospel of Animism," the author termed this philosophy the doctrine or theory of souls and spirits. He contended that visions, dreams, apparitions in sleep and at death revealed to primitive man his soul as distinct from his body. This belief, in time, was transferred to other bodies. As

* These Ampajoots (Yampah utes?) live in crevices in the rocks and in holes dug in the earth; they wear no clothing and their weapons consist of bow and arrow and a sharp stick. They wander over the barren plains searching for ants and grasshoppers, which they eat. Men, whose word I cannot doubt, have told me *that they feed on the dead bodies of their relatives and even eat their children. Laveille's Life of De Smet, p. 106.* "The Flatheads, living on the eastern slope of the Rocky Mountains, are the only tribe that have an idea of chastity." *Indian and White in the Northwest, p. 4.*

the human body was thought to live and act by the power of its indwelling spirit or soul, so the life and actions of all other existing things were believed to be directed by their own individual spirits. Briefly, then, the belief in human souls was intimately associated with a doctrine of spirits which were of the same nature as souls, but acted in a different way. Animism, then, is a belief that life in animals, and in all animate and inanimate things, is caused by the indwelling

Indian smoking.

presence of an imperishable spirit, the *oki* and *manitou* of the Hurons and Algonquins.

Superstitions of the Canadian Savage.

The Hurons and the Algonquins peopled the entire universe with okis and manitous, great and small, and thought that storms, winds, thunder and lightning, and all meteoric phenomena were caused by spirits. They did not distinguish between their own form of existence and that of the animals or objects everywhere about them. From this belief was evolved the idea of the "fetich." To

the Canadian savage, as to the African Hottentot, a fetich was any small object believed to have within itself a conscious spirit, an oki, or demon, revealed to him in a dream after a long fast. It might be a peculiarly shaped pebble, the head of a snake, the wing of a bird, or indeed anything which he could conveniently carry about him. This object he enclosed in a very small pouch suspended from his neck when in camp or on the hunt, or in his hair when engaged in battle with the enemy of his tribe. Sleeping or awake, it was never separated from his body. It was his own, his guardian spirit, and repeatedly, every day, or when exposed to danger, he invoked its aid, protection, and help.

The Canadian savage believed that all things had a life of their own, and that every object was controlled by its own independent spirit. Spirits were dwelling in and guarding the mountains, springs, plants, animals, trees, rivers, islands and lakes. The savages who accompanied Father Albanel, when he was crossing Lake Mistassini, warned him not to continue looking upon a distant island lest the spirits dwelling in it would be angry. The Montagnais of Lake Papinjimoucani —a delightful lakelet north-east of Lake St. John—told the Jesuit missionary, Father Laure, that under its waters lived many spirits, and that when the lake was unsafe for a canoe the spirits were quarrelling among themselves.

In the "Relation" of 1671-72 the Jesuit missionary, Father Nouvel, writes that the Algonquins believed that: "Each species of animal, fish, and bird has a particular *manitou,* which cares for it. Therefore, just as the Egyptians offered mice and rats on their altars, so these people (Algonquins) cherish a special regard for these animals, as was illustrated in the case of a mouse that we had caught and thrown outdoors; for a girl having snatched it up, and being inclined to eat it, her father took the mouse and bestowed a thousand caresses upon it.

"Upon our asking why he thus treated it, 'Because,' said he, 'I wish to propitiate the *manitou* that cares for mice, in order that the genie of the mouse may not hurt my daughter.'"*

Even the minutest flies and insects were, in the mind of a Huron or Algonquin, possessed with imperishable souls. He believed they took a diabolic pleasure in tormenting animals and men. "Why do you eat the lice you take from your hair and body?" asked one of the missionary fathers of an Ottawa Algonquin. "Why," he replied, "I eat them because they eat me."

Okis, manitous, and windigoes were the same as human souls, but they acted in a different manner. Some were tutelary spirits haunting caves, guarding or living in isolated trees of great size or dwelling in rapids or waterfalls. The cataracts of the upper Saguenay were haunted by windigoes or demented spirits of great stature, to whom the Porc-Epic Indians made offerings of bear flesh. The caves, huge boulders, and rough lands of the "Grand Mistassinis" were believed by the Mouatchichi, an Algonquin tribe, to be haunted by ghosts and evil spirits who, on dark nights, swarmed upon the lake in spirit canoes.

Ghosts or spirits haunted graves or a place where one of the tribe was killed or drowned. At times they appeared to men and women in subtle, material forms, as in vapours, fogs, and mists, or as an image retaining a likeness to the shape of a human body. All these spirits carried fear to the hearts of the members of the tribe who endeavoured to placate them by gifts and sacrifices.

Brave as they were when confronted with wild beasts or human enemies,

* Vol. 56, pp. 125-7.

Indian Magician (Catlin).

the unknowable, the intangible and the uncanny filled them with fear and terror. They believed that the visible world was filled with invisible demons, little devils, okis, manitous, and ghosts, who had the power, and often the will, to do them harm.

It was in vain that the Jesuit missionaries strove to inculcate more exalted views of the beneficence of nature by explaining and picturing the beauty of all things created, and the wisdom and love of God in making them the servants of man. In one of his addresses to the members of the Bear tribe of the Hurons, Father Brebeuf, after dwelling for some time on the folly of fearing the ghosts of the dead and the malignity of unseen spirits, exclaimed: "What is there so wonderful as to see the trees which have looked dead during winter, resume without fail every spring a new life and a new dress? The corn that you plant rots and from its decay springs up beautiful stalks and the full ears. And yet you do not say 'He who made so many beautiful things and who every year displays before our eyes so many marvels, must be some benevolent *oki*.'"

This faith in the universality of spirit life in all things led to a firm conviction in the mind of the savage of the interaction of forces between himself and the objects of nature everywhere around him. His efforts to utilize these forces resulted in divination, sorcery, communing with spirits and magic.

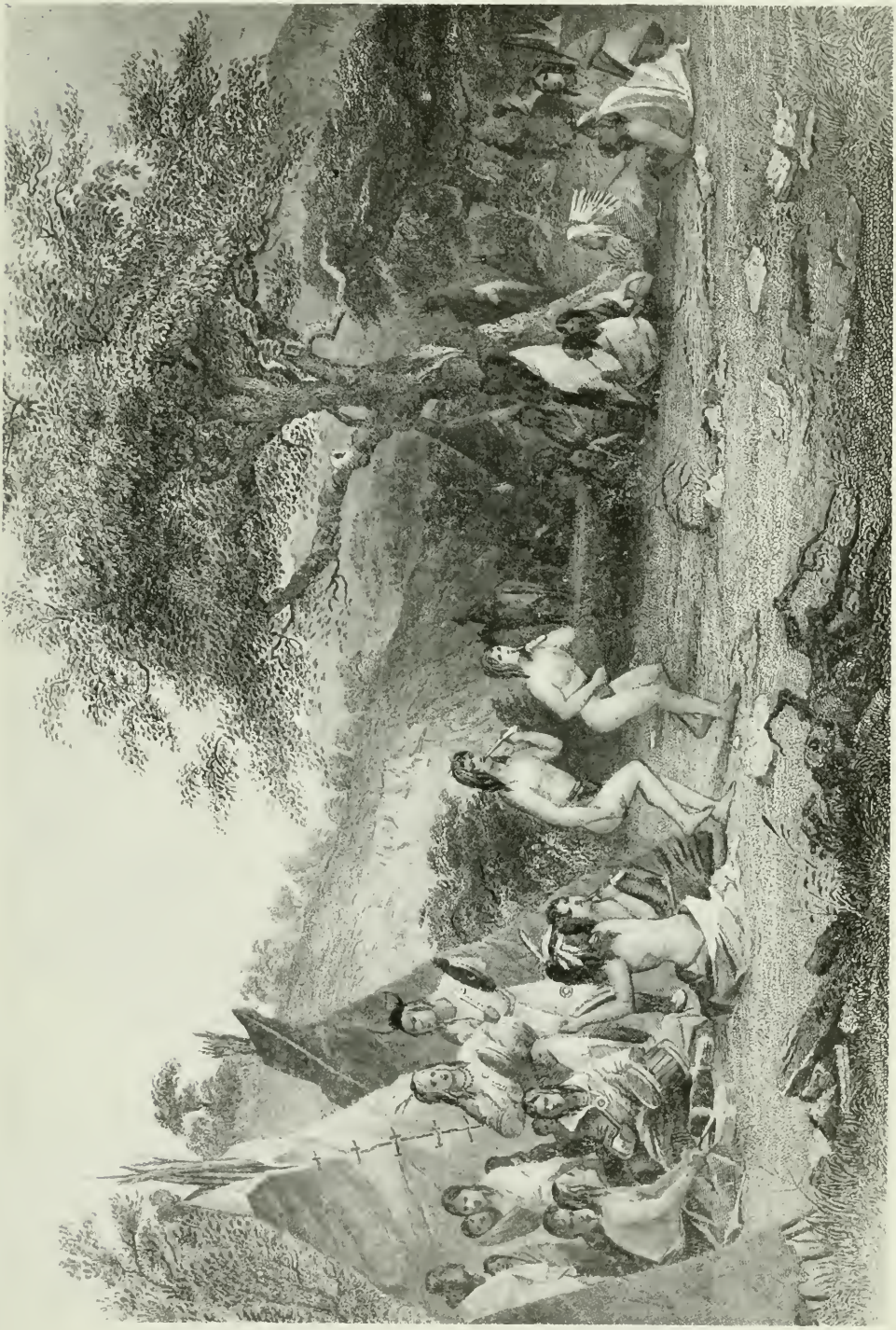
When the soul of a man or a woman—but not that of a child—left its body, it lingered for a time around the camp or village, haunting the woods and waiting for another soul to accompany it on its long journey to the land of departed spirits.

The Canadian savages greatly feared the ghosts of the dead. For many nights after a death in the village, a Huron warrior never went alone into the forest if anyone were dangerously sick, for he feared meeting a ghost waiting for the soul of the dying man or woman. Many of the hunters claimed to have met and spoken with the ghosts of the dead whom they unwillingly encountered when compelled to be abroad on dark nights. Nothing, not even the hope of good luck in battle, or the hunt, could tempt a Huron brave to pass near a grave or enter a graveyard when night shrouded the forest. They buried their dead with their faces to the west so that the soul would know the way to go to the Happy Hunting Lands. The graveyard was always opened to the west of the village so that the spirits of the dead would not have to pass through the village on their way to the spirit land.

The Dream and Primitive Man.

Apart from his intuitions, the fact that he dreamed while asleep satisfied the savage that his soul was distinct from his body and that it would exist in another world. He was sure that in his dreams his soul left his body and wandered around according to its own will and that it was in the place and with the persons or animals seen in his dreams. A sleeping man was never awakened suddenly or violently lest his vagrant soul would not return in time to reanimate his body.*

* The reader familiar with the classics will call to mind how, in the Iliad, the dead Patroclus comes to the sleeping Achilles, who vainly tries to embrace him, but that the soul disappears in the air as mist; and how the seer, Hermotimos, used to leave his body, till, returning from the last of his spirit travels, he discovered that his wife, believing he was dead, burnt his corpse on the funeral pile, and found he was then a bodiless ghost. These Homeric notions were evidently transmitted to the classic world from a barbaric or savage ancestry.



Indian worship of the sun (Schoolcraft).

Belief in the Immortality of the Soul.

Intimately associated with the belief of the savage in the animated nature of all things, was his unalterable faith in the immortality of his own soul. He thoroughly understood that his soul and body, though united, were separate entities and were not of the same substance. The belief in the immortality of the soul, which philosophers contend is proved by processes of reason or is a revelation from God to man, was to the savage an intuition. Theologians and philosophers have proved to a finality, by logic and revelation, the immortality of the soul, but the savage knew it by intuition. This intuition was as intimately identified with his mentality as were his thoughts. The Hurons and Algonquins, then, demanded no logic or revelation to convince them of the imperishability of their souls, for they knew it intuitively. This intuition was an inseparable part of their being and much stronger than a belief born of logic can ever be. This belief of the savage was of great assistance to the Jesuit missionaries when they began instructing the Indians in the doctrines of Christianity.

The Huron believed firmly that his soul continued to live after the death of his body, and however low the savage descended this faith remained with him. Influenced by this belief in the survival of the soul, they never carried a dead body through the common entrance of the lodge, but broke an opening through which the body was carried to its grave, and this they did because they contended it would bring misfortune to the living to use the door through which the dead had passed.

The Hurons carried their unalterable belief in dreams even to the point of offering human sacrifice, or feeding on human flesh. Father Jean de Quen, in his "Relation," 1655-6, records that: "One of them (Hurons) having dreamed that he gave a feast of human flesh, invited all the chief men of the country to his cabin to listen to a matter of great importance. When they had assembled he told them that he was a ruined man as he had a dream impossible of fulfilment: that his ruin would involve that of the whole nation to be followed by the destruction of their hunting grounds. He then asked them to guess what his dream was. All failed but one, who said: 'You dreamed to give a feast of human flesh. Here, take my little brother. I give him to you: cut him up and put the pieces in the kettle.'

"All present were seized with fright except the dreamer who said that the oki of his dream demanded a woman. Superstition went so far that they adorned a girl with all the riches of the country—just as the victims of old were adorned for immolation; and the innocent girl, not knowing why she was made to look so pretty, was actually led to the place appointed for the sacrifice. All the people attended to witness so strange a spectacle. The guests assembled in their places and the victim was led into the middle of the circle. She was delivered to the dreamer, the man for whom the sacrifice was to be made. He took her, all watched his actions and pitied the innocent girl, but when everyone thought he was about to give her the death blow, he held his hand and cried out, 'I am satisfied; my dream demands nothing more.'"

There is here a striking analogy between the voice of the dream-oki, the sacrificer and the victim with the prepared sacrifice of Isaac recorded in the twenty-second chapter of Genesis. We have here an absolute submission to the will of the dream-oki, and an instance proving the strong bond which united the men of the same tribe to one another, and of fear, affection, or loyalty to the okis of their

dreams. Such was the tyrannical influence of the dream that even natural affection went down before it: a brother would surrender his brother to death, a father would lead his daughter to the grave.*

The Jesuit missionaries to the Hurons and Algonquins experienced great difficulty when they attempted to prove the absurdity of the superstition which centred in their dreams. Father Brebeuf in his "Relation," written in 1636, writes:

Ancient Indian Dress. (Catlin.)

"The Hurons are absolutely controlled by their dreams. If a chief speaks one way and a dream another, the chief might in vain shout his head off. The dream often governs in their councils. Traffic, fishing and hunting are entered upon usually under its sanction. They hold nothing so precious that they would not deprive themselves of it for the sake of a dream. A dream will sometimes take away from them their whole year's provisions. It prescribes their feats, their dances, their songs, their games—in a word the dream does everything, and is

*Vol. 42, p. 155.

in truth the principal god of the Hurons." So tyrannically was the dream the master of the savage mind that the Jesuit missionaries were convinced that if a Huron dreamed he had killed one of them, he would seize the earliest opportunity of murdering the victim of his dream.

In concluding this paper it may interest the reader to be informed that when an Indian recovered from a lingering disease or a serious accident, he discarded his old name and took a new one, and this he did from a belief that in some way his old name was associated with bad luck. "They tell me," wrote one of the missionaries, "that the savages often change their names. They are given a name when born; this they change when they pass the age of puberty. Moreover, if any one of them recovers from a serious sickness, he drops his name and takes a new one."—"Relation," vol. 16, p. 202.)

SNOWSHOES

Many and various, the world over, are the devices for protecting the feet and assisting in transportation on foot. From the sandals and clogs of our forefathers to the unsightly and ungainly shoe of our modern women the varieties and shapes are innumerable. From the impossible shoe of the aristocratic ladies of China, with their compressed feet, to the easy-fitting moccasin of our Algonquin tribes, there is just as wide a range in purpose and in ideals. In all parts of the world the equipment for footwear is usually so manufactured that it will best serve the purpose it was intended for and will not fail the wearer as an effective and lasting protection. Thus the boot of the Alpine climbers is no better suited to its purpose than the snowshoe was to the needs of the travelling Algonquin Indians in the vast forests of this province (Ontario) for centuries before European civilization had influenced their habits and customs. The shifting sands of Egypt and the vast desert tracts of America were best traversed by the primitive races with nothing more on their feet than the tegument nature had supplied them. But in the snow-clad land of our northern hemisphere, with its long winters and its soft snow, feathery and often many feet in depth, no equipment for the feet could be more serviceable than the snowshoe. And in no other land were snowshoes so commonly used as in the length and breadth of the territory now forming our great Dominion. From the stalwart Iroquois south of the Great Lakes to the short and chubby Esquimaux encircling the shores of the Arctic or inhabiting the numerous islands of that great icebound ocean; from the stormy shores of the Atlantic to the valleys and mountains of the Pacific, all our native races adopted those aids to easy and rapid travel and transportation over the vast fields of shifting snow.

"In methods of making," as was said in a former Report, "they show an ingenuity which, if the same brain energy had been exercised in other walks of life, might have caused the primitive Indian to have occupied a position amongst our semi-civilized races of to-day."

Probably the earliest reports of their use is to be found in the "Jesuit Relations," Vol. 3. Therein Le Jeune states: "When it snows a great deal and the snow does not freeze over, then they cannot put their dogs upon the chase because they sink down; the Indians themselves do not do this for they wear snowshoes upon their feet which help them to stay on top." In Vol. 7. of the "Jesuit Relations," the same writer very ably describes the "shoes" (moccasins) to which the Indians attached their snowshoes. He informs us that "they are not hard like ours, for they do not know enough to tan the leather; our deer-skin gloves are made of skin which is firmer, or at least as firm, as their moose skins of which they make their shoes. Also they have to wait until these hides have been used as robes and until they have been well oiled, otherwise their shoes would shrink at the first approach to the fire, which they do anyhow, well oiled as they are, if they are brought too near the heat. Besides, they absorb water like a sponge, so that the Indian cannot use them in this element, but they are very serviceable against snow and cold. It is the women who are the seamstresses and shoe-makers. It

Indian hunting buffalo in deep snow—using snowshoes.

cost them nothing to learn their trade. A child that could sew a little could make the shoes at the first attempt, so ingeniously are they contrived. For winter use these shoes are made large and capacious. Their feet are well-wrapped in rabbit skins or other pelts properly Indian tanned—with this they frequently use moose-hair. Having thus wrapped their feet they put on their moccasins, occasionally wearing two pair. These are tied over the instep with a leather thong which is wound about the corners of their shoes. Such a covering of the feet was necessary in using the snowshoe." For such purposes our modern shoe is useless. The fair daughters of Ontario and the athletically inclined gentlemen, fond of outdoor sports, now use the same kind of moccasins and the same kind of snowshoes as were vital necessities to our dusky aborigines for centuries before any European dreamed of a western continent.

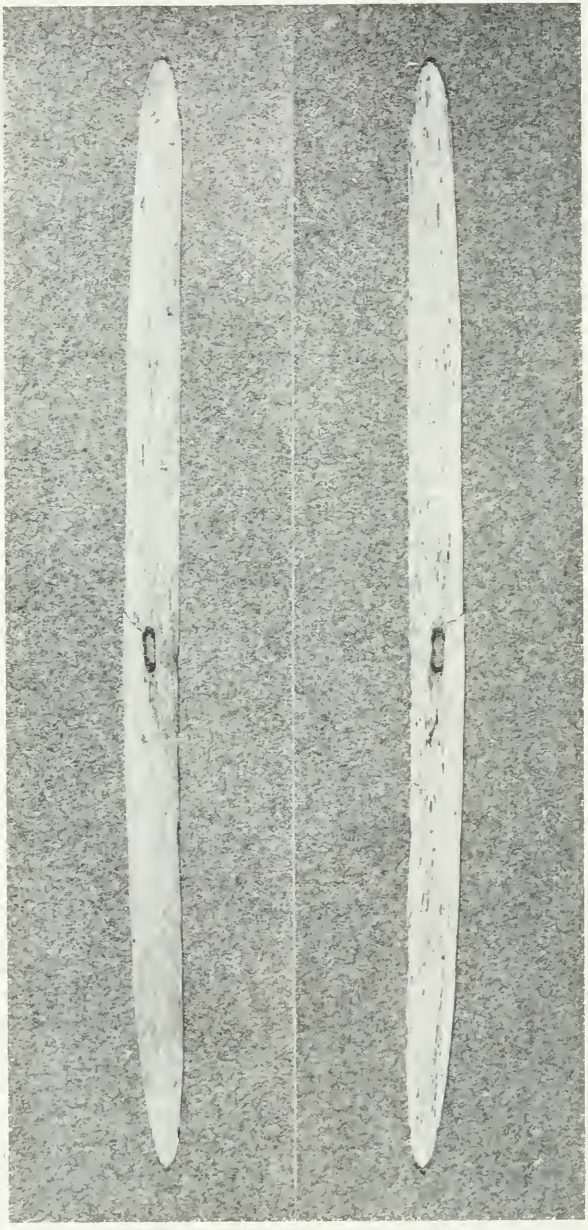
The moccasin is as necessary an appendage to the snowshoe as the paddle is to the far-famed birch-bark canoe. These two survivals of the prehistoric culture of America are now permanent elements of our Canadian life. It is needless to say that the northern Indians were experts in the manufacture of snowshoes. First, they shaped a stick of hickory or ash, about half an inch in diameter and several feet in length, in the form of a long ellipse that sharply contracts to an acute angle where the ends of the stick come together and are fastened to become the tail of the shoe. This elliptical frame varies from two to four feet in length and from ten to eighteen inches in width. The whole frame is strengthened by a narrow flat strip of wood fitted in about four inches from the front and a similar piece about double that distance from the tail of the shoe. The interior of the frame, with the exception of a space of about four inches wide back of the front cross-piece, is filled in by weaving thongs into a network whose meshes vary according to the design of the maker.

At the edge of this four-inch opening the ball of the foot was lashed with thongs which pass around the heel for the support of the foot. The heel was left free to work up and down and the opening was designed to allow the toe of the foot to descend below the surface of the shoe, when the heel is raised at each step in the act of walking. It is a very simple invention but exactly adapted to its purpose. A person accustomed to snowshoes can walk far more rapidly upon the snow than without them upon the ground. In hunting, especially, it is of the greatest service.

In their manufacture a needle of bone or horn was used for netting the snowshoe. The shape of the implement was flat and rounded at each point, to enable the needle to be used either backward or forward. The eye which carries the line is in the middle. Various sizes of needles are used for the different kinds of netting, of which the meshes vary greatly in size.

Mason, as I have written on another occasion, in describing the snowshoes, states that "the parts are the wooden rim; toe and heel crossbar of wood, or rawhide; extra strengthening bars; foot netting in large meshes with a stout thong for the foot to rest upon; toe and heel netting closely meshed with babiche or twisted sinew; and foot-lines for attaching the shoe." The varieties of their snowshoes were almost as great as their linguistic stocks. With these articles of footwear the Indians were enabled to travel great distances following their dog-sledges. During the winter hunts they were of immense value and service; slipping stealthily over the snow, they were upon their prey before it was aware of their presence. In endurance they are equalled by few and surpassed by none

of the races the world over. The Indian on the sides of the Andes in South America, the Indian of Mexico or California, or his no less illustrious and fast-running brother of Ontario, are all even to this day celebrated for their speed



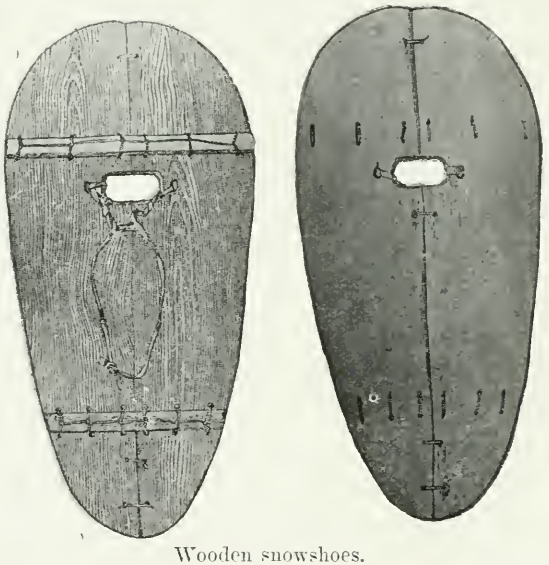
Needles used in making snowshoes.

and endurance. These men have been utilized on both continents of America by the eastern races succeeding them—whenever long distances had to be covered in the shortest time, such as when carrying the mails or express parcels. It is only a few years since those fleet runners in our Canadian West, with their dog-sledges, distributed the mails from Fort Garry away west to the Rockies and as far north

Indian Snowshoe Dance—after first fall of snow.

as Athabasca Landing. Our own Algonquin Indians were celebrated travellers. They covered the continent from the Atlantic to the Rockies and from the Gulf of Mexico to the headwaters of the Saskatchewan. While their modes of transportation were not numerous, yet for a semi-civilized race they were of the highest order."

In the Ontario Provincial Museum there are no examples of snowshoes from the Indians of Canada that were not made with metal tools. We have no remains of an ancient pre-French and purely Indian type. Therefore, the utmost caution should be used in estimating the constructive skill of those tribes that were long associated, as trappers, with the French and the English; nor should this element of European contact be forgotten when examining snowshoes that appear to be a ruder and less finished product. The very fine babiche is impossible without the curved steel knife; and the refinement of the snowshoe seems to date from its introduction. Babiche is a skin thong usually of eel-skin. The word is derived



Wooden snowshoes.

through the Canadian French from one of the eastern dialects of Algonquin. The term is old, and occurs in Hennepin (1688). Raw-hide, the great strength and toughness of which rendered it almost as useful to the Indian as sinew, is made from the various aquatic and land animals. In preparing raw-hide the skin was fleshed, dehaired and stretched till it dried; when ready for use, it was cut in strips of different sizes. It was used for harness, thongs, whip-lashes, wattling for making cages, fencing, etc. Narrow strips, called babiche by the French, were employed for fishing and net-lacing for snowshoes.

As a device for enabling one to travel on the surface of the snow, the snowshoe, it will be readily realized, is absolutely necessary to the welfare of hyperborean peoples in walking, in hunting, in pulling a sled or in driving a team of dogs attached to the sled. To the Indian, who has to secure his supplies for his band, it was more necessary than the sled, and much more necessary than even his birch-bark canoe. Snowshoes are of two kinds: first, those of wood—the *skee* or its equivalent; secondly, the netted snowshoe, or that which is described in this article. The netted snowshoe has had its development from two pressing

necessities—the necessity for timber sufficiently large and strong from which to make them, and the demand for a footgear that will help the wearer in an emergency to draw a heavy load through deep soft snow. The snowshoe line southward is the isotherm of northern New York in winter. North of this line there was an abundance of raw material for making them and the quantity manufactured depended on the demand. There was also a northern limit to good snowshoes. Beyond it, within the Arctic Circle, the snow became hard enough in the long winter to sustain the hunter without them. Snowshoes are not known to have been used in the northern hemisphere south of the Kalamath River in California. Lafitau describes snowshoes and their use in his "Moeurs des Sauvages": †"In the snow where there is no beaten track, they are obliged to make use of snowshoes, without which all kinds of journeys, whether for war or for hunting,

Buffalo-hunting on snowshoes.

etc., would be absolutely impossible for them. The shape of these snowshoes is almost elliptical—that is to say—the ellipse is not perfect, being more rounded in front than at the other extremity, which terminates more or less in a point. The largest are two and a half feet long, and one and a half broad. The rim, which is of wood, hardened in the fire, is pierced all round like the raquettes* of

*Raquettes: snowshoes. This word is very old: its earlier forms were *rachete* or *rasquete*. It is derived by Littré (through Low Latin *racha*) from the Arabic *raha*, "palm of the hand;" by Menage and others, from Latine *reticulata* "netted." In either case, its present use is traceable to certain ball-games. The earliest of these was that called by the French "paune" (from Latin *palma*), in which the ball was struck with the palm of the hand; it was exceedingly popular in the countries of Western Europe and was common at least as early as the thirteenth century, afterwards becoming known as "tennis" (a word of uncertain derivation). To apply the name of *raquettes* to the snowshoe, so similar in outline to the palm of the hand and to an instrument used in the well-known European game, was an obvious and easy transition. The use of netted snowshoes was universal among the North American tribes, from whom it has been adopted by the habitants of Canada.

†Translated by E. O. Mitchell.

our tennis-courts, which they resemble with this difference, viz., the meshes are much closer together, and the strings are not made of gut, but of raw deer-skin and cut very thin.

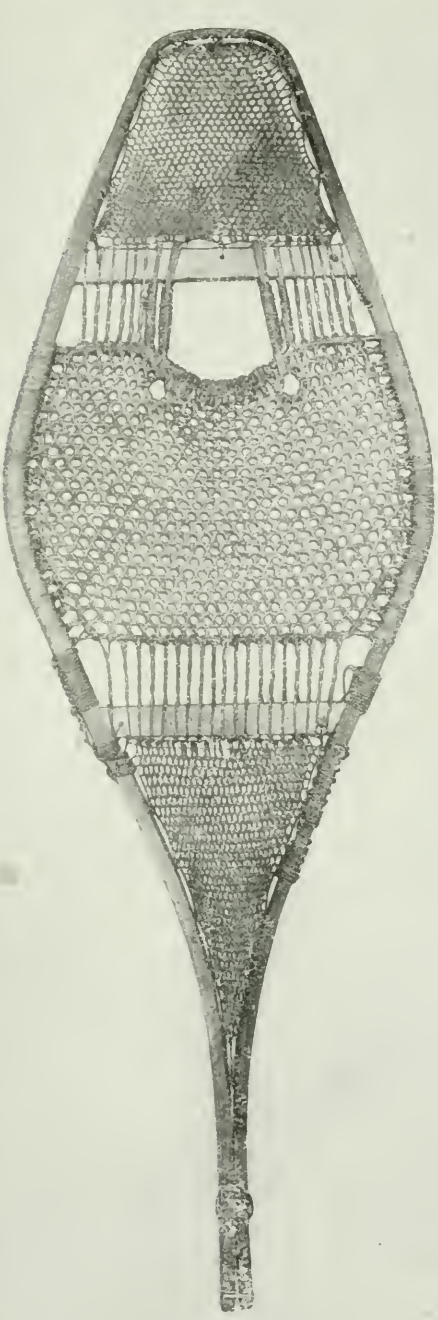
"In order to keep the body of the snowshoe firmer, two cross-bars are put there, which divide it into three compartments of which the middle one is the broadest and longest. In the middle portion, towards the side where the end is rounded, an empty space, arc-shaped, is let in, of which the cross-bar acts as the chord: that is, where the point of the foot must be kept without touching the cross-bar, which otherwise would be weakened. At both ends of the arc are two little holes through which are passed the straps that fasten the foot upon the snowshoe. These straps are passed one over the other, and, after being crossed, are passed through the rim of the snowshoe and then brought behind and underneath the heel, whence they are brought back over the "uppers" and there knotted. This is done in such a way that, although the foot may be well fastened in, it it held only at the toe, and one can get out of the snowshoe without putting a hand to it.

"Herein is one more peculiar custom of early times that has passed from Asia into America with the nations that have been transplanted there. Strabo, speaking of the people that inhabit that long chain of mountains that extend from Mount Taurus to the Caucasus, relates this in particular about them: 'They can not ascend to the summits of these mountains in the winter-time: but the inhabitants go there in the summer and, on account of the snow and ice, attach to their feet pointed shoes made of raw ox-hide and as broad as a drum. They then let themselves glide down from the tops of these mountains, seated upon a skin: the same practice is carried on in Media and Mount Mafius, which is in Armenia. There they attach also to their feet small shields made of wood terminating in a point.'

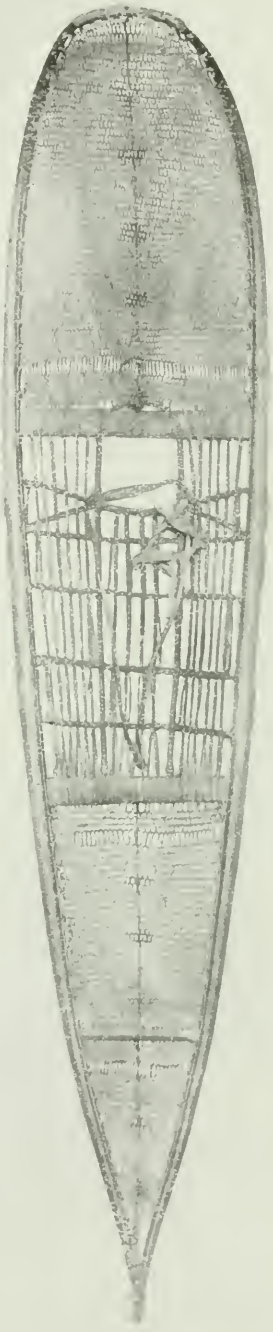
"Suidas says in like manner that the soldiers of Alexander the Great, by means of hoops furnished with rushes, passed without trouble over the snow which in some places was up to sixteen feet deep. As they still make use of snowshoes in Colchis and in those countries of which Strabo speaks it is evident that in his description he meant nothing else than snowshoes by these 'ox-hide shoes, broad as drums.' The wooden shields (which are really skates or their equivalent) which Strabo tried to describe, are necessary in countries of ice and snow where they have to put points on the iron shoes of the horses to give them a foothold.

"As for the manner of letting themselves glide down from the top of the mountains, Strabo depicts for us a custom which is still observed on Mount Cénis and in the Alps. It it what they call 'la ramasse' (the sledge) a kind of sleigh with a little seat at the bottom where the traveller is compelled to sit. The inhabitants of the country, skilled in guiding this kind of conveyance, seated low down in front, direct it with their hands by means of the shafts of the sledge itself; and with the spikes with which their heels are furnished they arrest their course as they wish, whenever it is too impetuous. Nothing is more rapid and more agreeable than this way of coming down the mountains. The savages, instead of a skin, use a piece of bark, in case of necessity. It is an amusement which the children do not fail to afford themselves in winter time, when they have near their villages some eminence of which they can take advantage."

Frederich Whymper in his work "Travel and Adventure in the Territory



No. 36370—Manitoba.



No. 22196—Loucheaux snowshoes, South Mackenzie River.

of Alaska," states: "The sledge used at this fort and generally through the Hudson's Bay Territory at this part of the continent, is perhaps the simplest in the world. It is nothing but a plank twelve inches broad by sixteen feet in length, one end bent upwards in a prow-like form, having been softened by steam for the purpose. Thongs keep the curved end in its place, and a few cross-pieces of lashing complete it. It is a kind specially adapted for soft snow. The snowshoes commonly adopted were shorter than those employed by the Russians, and were pointed at either end."

Bush, in "Siberian Travel and Exploration," states: "While here we derived no small amount of amusement, as well as exercise, in learning to use the snowshoe, which we thought would probably be an important aid in our further journeys. These snowshoes were made of white birch about six feet long by eight or ten inches in width, and were shaved down to not more than a quarter of an inch in thickness, making each pair weigh about eight pounds. They were soled with skin taken from the legs of the elk, deer, or horse, stretched so that the hair flowed toward the heel, making the shoe glide forward very easily, and preventing it from slipping backward while making an ascent. The skin of the elk is best, but is hard to obtain, and that of the horse is also very good. On the seashore seal-skin is used for the same purpose. A person can travel much faster with these shoes than he can walk: for, though he steps much the same, yet, in addition to the length of the pace, the shoe slides several inches with each stride.

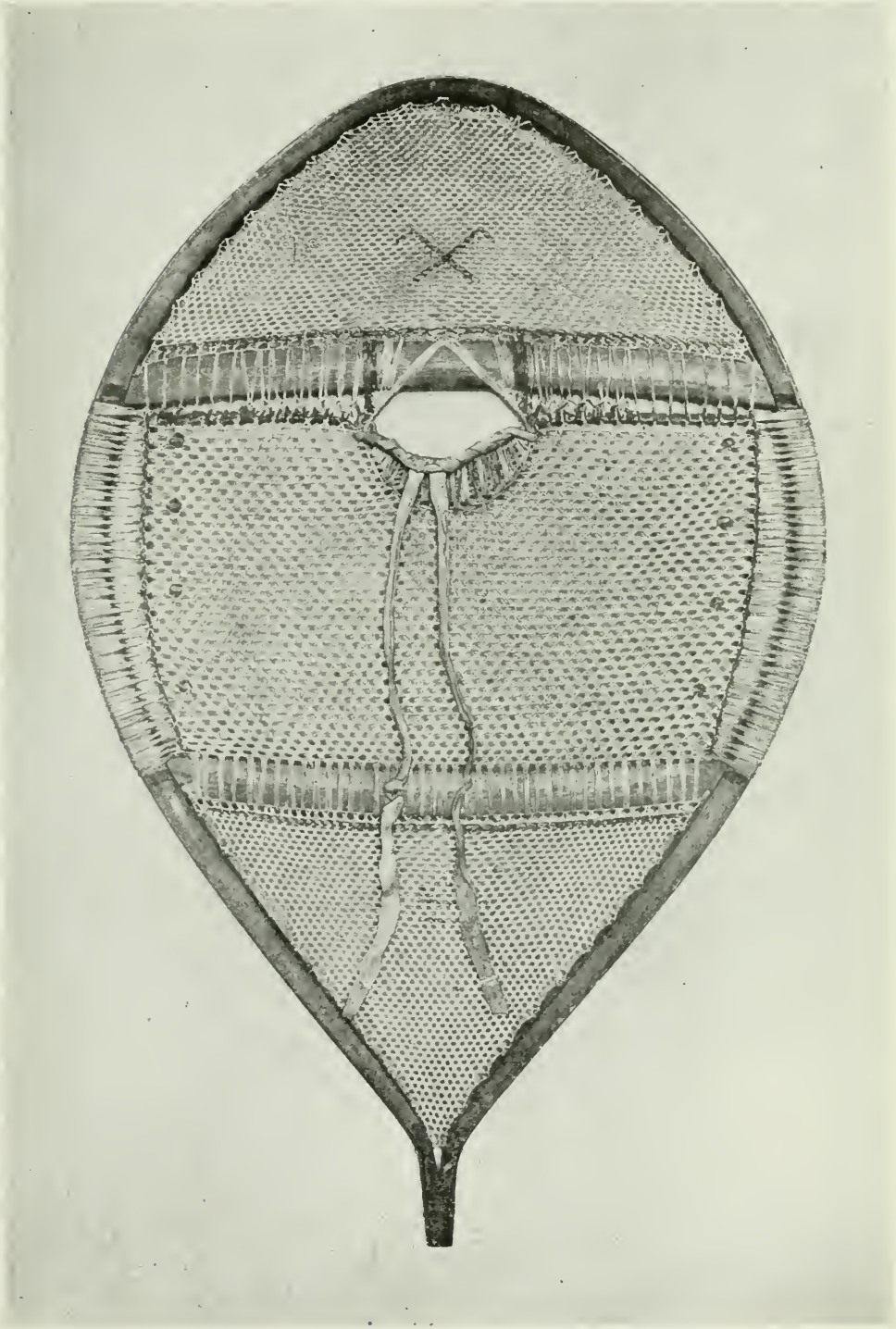
W. H. Ball in his work "Alaska and its Resources," remarks: "I have spoken of travelling on snowshoes. To travel without them in winter is impossible, but sometimes on an old, well-beaten road, or with a hard crust on the snow, and while travelling over ice, they are not needed. The different kinds of snowshoes are, in a measure, characteristic of the locality where they are used.

"The Innuit snowshoe is small and nearly flat. It is seldom over thirty inches long. The netting is open and strong, being made of fine remni. That which supports the foot is made of strong mahout, which passes through holes in the frame. It is strong, simple, and well adapted for walking on the hard snow of the coast. Both shoes are alike.

"The Ingalik snowshoe is much larger. Mine were five feet eight inches long, and strongly curved up in front: there are always rights and lefts, a slight difference being made in the curves of the frame of the two shoes. They are much wider in front and the netting, which is of deer sinew twisted into twine, is much closer than in the Innuit shoes. The netting under the foot is the same. In all the snowshoes the strings are alike. Two short loops for the toe and a long one around the foot above the heel, fasten it to the foot. In walking the toe sinks into an opening in the netting provided for the purpose. Beginners strike their toes against the bar, but after some experience they learn how to adjust the loops to prevent this.

The Kutchin snowshoe is made a little smaller than the Ingalik pattern, and much in the same style. The netting is much closer and finer, and is made of fine line, cut from prepared deer skins, called babiche. The whole shoe is prettier and more artistic. It is frequently painted and ornamented with beads.

The Hudson Bay snowshoe is very small, thirty inches being the regulation size. This is in order that it may sink deeper in the snow and beat a better road for the sleds. It is sharply curved upwards in front and is furnished with a knob to break the crust in the snow. The frame is flat, not rounded as in the



No. 38446—Labrador.

other kinds. The foot netting is put on around the frame and not through holes in it. All the netting is very fine and close, and made of babiche. They are generally painted in gay colours and ornamented with tufts of coloured worsted. The latter in moist snow must be a great nuisance as the snow must stick to them and greatly increase the weight. In hunting, the Hudson Bay men use the larger Kutchin shoe. The latter is probably the best of all for general use."

In his celebrated work on Indian tribes, Schoolcraft, who was himself married to a Chippewa Indian princess, states: "It is also during the prevalence of the rigors of winter that the very singular appendage to the moccasin, called snowshoe is worn. It is simply a contrivance to keep the foot from sinking in soft snow. For this purpose two bows of hard wood are formed and bent elliptically; the two ends of the bows being brought together, and closed behind the foot, forming a projection. Two cross-pieces are put to the front part for the foot to rest on, and a third piece behind the heel to give firmness to the frame. The whole surface is then laced over with deer's sinews or strips of hide. A thong of leather confines the foot to the thwarts, permitting it to play freely, and the whole appendage hangs from the toes, resembling a vast sandal, allowing the muscles the freest scope.

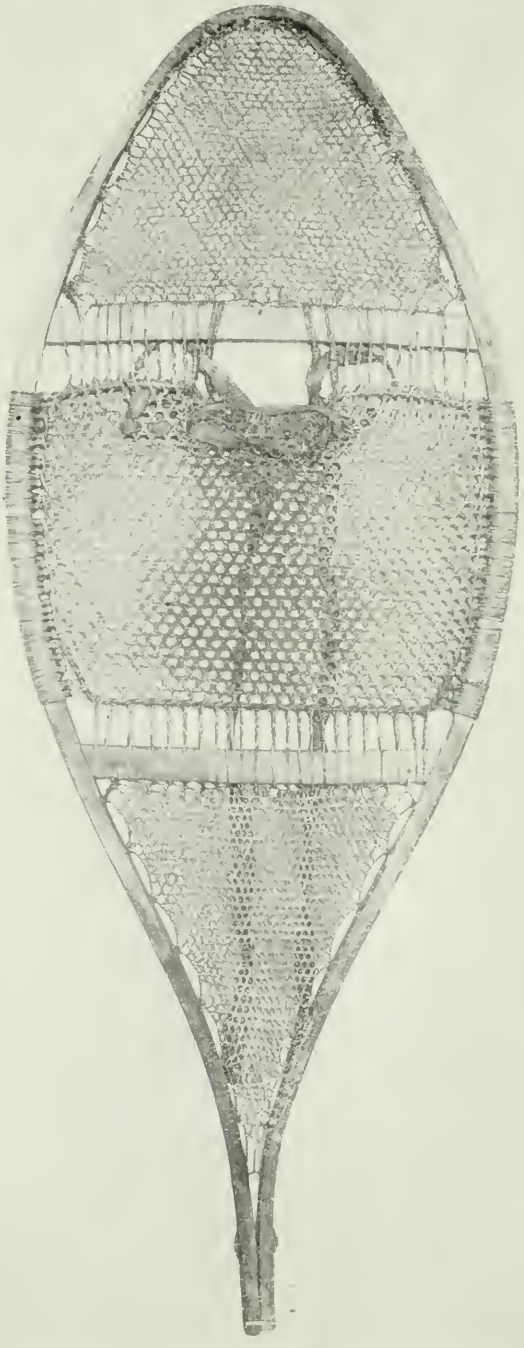
"Various sizes and shapes of the snowshoe are worn by the different tribes. There is also always a female snowshoe, which is shorter, and has some peculiarities of shape. The cording of the latter is often painted in fanciful colours, and furnished with light tassels."

A plan to capture deer in the winter is as follows: A herd of deer is discovered and men and women put on their snowshoes. The deer are surrounded and driven into a snowbank many feet deep in which the affrighted animals plunge until they nearly bury themselves. The hunters armed with lance pursue them and kill them. This means of procuring deer is only adopted when the herd is near a convenient snowbank of proper depth. The snow falling in the winter collects in the gullies and ravines, and only in seasons where there has been abundance of snow will it attain sufficient depth to serve the purpose.

The Huron-Iroquois and Algonquin types of snowshoes are especially well contrived and made, evidently suggesting that their predecessors, or more likely the predecessors of one of them (the Algonquin) at least, had long existed in a land of deep snow. In the country in which most of the Huron-Iroquois resided previously to European contact, the snowshoe was indispensable for nearly a third of a year. Lafitau says that children learning to walk are taught to toe inwards in order that they might walk better on snowshoes when the time came.

Snowshoes are frequently mentioned in early British orders to the troops in Canada. In Knox's Historical Journal we find in the standing orders for the garrison at Quebec for November, 1759, the following: "As the regiments will have a number of creepers, snowshoes or rackets and mogosans delivered to them, they will take care to keep them properly fitted, that they may be come at for use on the shortest notice; the snowshoes to be kept hung up, to prevent the rats and mice from eating them. Each regiment will likewise have a number of snowshovels, to clear away within their own districts, and to keep open communications."

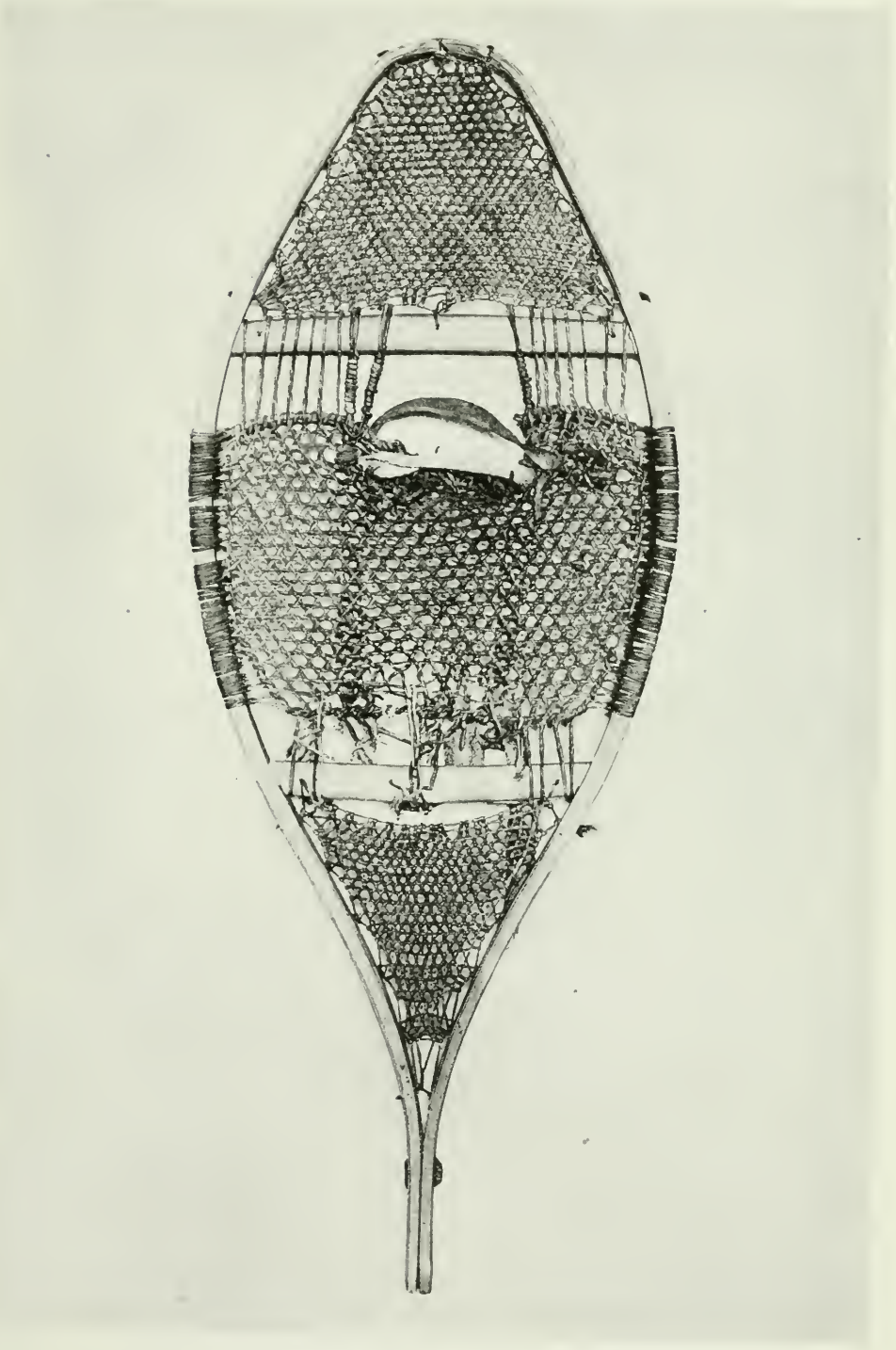
In the same journal for December, 1759, the Captain makes the following reference to snowshoes: "Our soldiers make great progress in walking on snowshoes, but men not accustomed to them find them very fatiguing. These inventions are made of hoops of hickory or other tough wood, bended to a particular



No. 36369—Northwest Territories.

form, round before; and the two extremities of the hoop terminate in a point behind, secured well together with strong twine: the inward space is worked, like close netting, with cat-gut or the dried entrails of other animals. Each racket is from three-quarters to one yard in length. At the broadest part, which is about the centre, where it is fastened by thongs and straps to the person's foot, it is about fourteen, fifteen, or sixteen inches: a light lively man does not require them so large as he who is more corpulent and less active: the hard-soled shoe is not at all suitable to them: they must be used under mogasans, as well for the sake of the wearer's feet, to keep them warm and preserve them from the snow, that they will not bind on so well, nor be so soon worn out." "The uncouth attitude in which men are obliged to walk is what renders them laborious; the body must incline forward, the knees bend, ankles and instep remain stiff as if the joints in those parts were completely ossified, and the feet at a great distance asunder; by this description, which is the best I can give, the reader may form to himself a lively idea of the snowshoes, or snow-rackets, so frequently mentioned in the course of this journal, and the use of them; the boys in Canada have them suited to their own size, and walk on them for exercise, and as one of their winter sports: the heaviest man whatever, with a pair of them, may walk on snow that would take him to his neck and shall not sink above an inch and a half or two inches: light men, who are accustomed to them, leaving barely their impression behind them. This invention, which I have delineated, seems to be a great improvement upon the kind used by the Russians and Calmuc Tartars in Siberia: one of their travellers thus describes them: 'They are made of a very thin piece of light wood, about five feet long and five or six inches broad, inclining to a point before, and square behind: in the middle is fixed a thong through which the feet are put: on these shoes a person may walk over the deepest snow for a man's weight will not sink him above an inch: these, however, can only be used on plains. They have a different sort for ascending hills, with the skins of seals glued to their boards, having the hair inclined backwards, which prevents the sliding of the shoes, so that they can ascend a hill very easily: and, in descending, they slide downwards at a great rate. In America they have only one kind of snowshoe, both for hill and dale, and, by their central part being worked, as I have observed before, racket-fashion, they cannot slip backward or forward, in going up and down a precipice: besides a board seems to be a rude discovery: for, when the snow clots to the under parts, it must render them heavy and troublesome: and I am inclined to think the tightness, that seems requisite in fastening on a boarded shoe of such an unwieldy length, must incommode the foot considerably: whereas the rackets are secured with such freedom and ease to the feet that the muscles and sinews are not confined, neither is the circulation of the blood interrupted, a circumstance deserving of the highest attention in all frozen climates.'"

Example No. 22196 illustrates one of a pair of Loucheaux snowshoes brought from the south Mackenzie River and presented to the Museum by the Rev. A. E. Whittaker, in 1901. This specimen is leaf-shaped, suddenly tapering at the heel. The frame is of willow and in two pieces, spliced and neatly wrapped in front, pointed oval in section, and well turned up at the toe. This is much more the case in one specimen than in the other. They are bluntly pointed at the heel and have three crossbars. The perforations of the frame run vertically through a keel on the inner side of the front and hind space, quite through at the sides of the foot space.



No. 36368—Northwest Territories.

Example No. 27052 is a pair of snowshoes presented to the Museum by Austen Bill, of Ohsweken, Six Nation Reserve, in 1905. They are of purely Indian workmanship and bear all the evidences of considerable use. The wood in the frames is ash. These shoes are quite flat and provided with two cross-pieces. The perforations in the frame for the selvage thong of the netting are V-shaped, and as in all other examples they meet a little way within the outer side of the frame, so that the bend in the thong is countersunk or concealed. The centre space of the frame has no holes thus rendering the shoe very strong. Buckskin thong is used for the netting and is much thicker and stronger in the footspace.

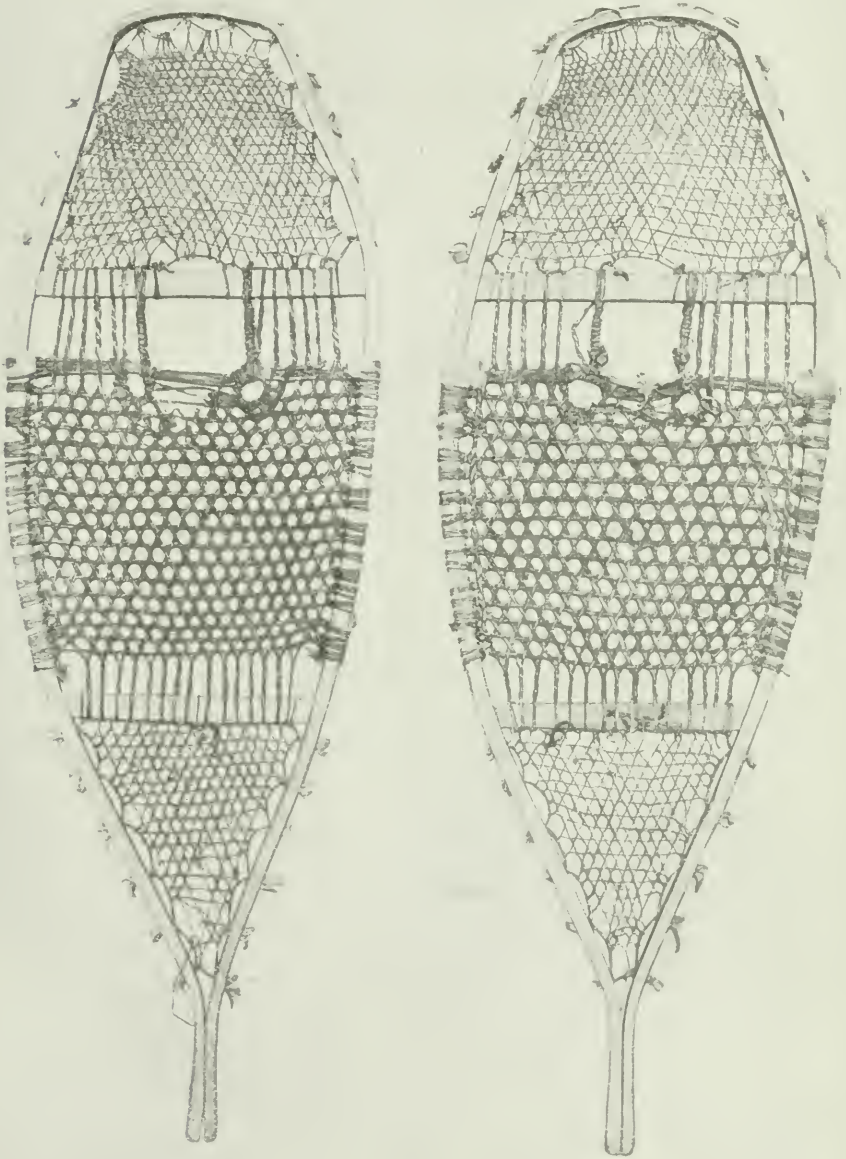
The weaving is done immediately through the selvage thong about the frames, but it is twisted and looped around an additional thong athwart the crosspieces. On the hinder bar this added thong is caught under the double ends of the central space weaving, and furthermore, is held in place by an extra winding of thong.

The netting of the central space is looped about the frame and crossbars by a curious knot, consisting of a half hitch, and a plain wrap instead of the conventional knot. The cross thongs that form the footing are swung to the front crossbar by stout thongs, doubled twice, and neatly wrapped with the same. Instead of perforations in front crossbar a stout thong is wrapped about the middle, to hold the front netting and prevent abrasion by the moccasin.

Example No. 27051. One of a pair of snowshoes, also presented by Austen Bill and of Six Nation Reserve manufacture. The frame is of ash and has been squared out with a knife. In method of construction it is similar to the previous one, No. 27052.

Example No. 38446 is one of a pair of snowshoes in the Provincial Museum; they were brought from Labrador. In the specimen here illustrated two staves of spruce whittled into rectangular cross section were spliced in front and bent into a kite shape with body somewhat square in general outline and corners then rounded. At the fourth or heel corner the ends instead of being spliced are pushed forward to form a tail or trailer and sewed together through countersunk holes. This frame is not of uniform thickness but is thickest at the sides. This specimen lies flat on the ground. The babiche netting of toe and heel is attached by regular hexagonal weaving to a border cord which is rived through the frame and obscured in countersunk cavities on the outside. Along the crossbars the toe and foot netting are laced into a border cord laid under the loops of the foot netting, excepting in front of the foot space where the border cord is rived through the crossbar. The netting of the foot space is woven hexagonally out of coarser babiche. Especially noteworthy is the tough band of hide forming the front border of this network, passing straight from both sides of the frame to the foot space, where it is curved backward and held in form by stout bracings of hide. Under the toes it is sewed with babiche. On the right and left margins the network does not pass entirely outward to a border cord rived through the frame, but the bends make double loops about the frame at each excursion and are gathered into a straight selvage. This central web is also looped to the crossbars. The shoe is attached to the foot by a soft band of buckskin forming toe and heel loop.

Examples No. 36368-36369 are most interesting specimens of snowshoes. They are of Algonquin types (Cree) and were presented to the Museum by Mrs. B. Arkle, whose brother the celebrated Canadian artist, Mr. Armstrong, who was an



No. 27052—Six Nation.

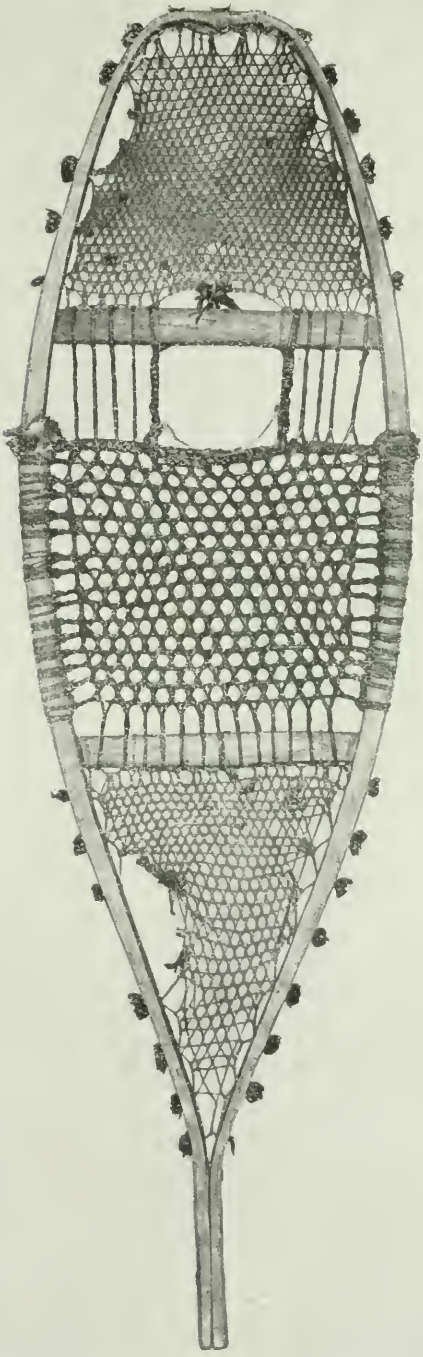
engineer during construction of the C. P. R., secured them from the Cree Indians. The frame of 36368 is of box elder, that of 36369 is of ash. Each consists of a single piece smallest at the toe, widening and thickening toward the foot rest and tapering again towards the tail. These western Canadian examples of snowshoes represent the western idea of perfection as the Renfrew examples do the east.

Example No. 36370 is a Northwest snowshoe presented to the Museum by Mrs. B. Arkle, of Toronto. The frame consists of one piece of Northwest maple, squared and tapered. It is almost square in front and joined together at the heel with a long trailer; flat, somewhat short and broad, and having two crossbars set well front and back. The front and rear netting is very light and is attached to the knotted selvage thong in the usual way. The ingenuity of the maker has exhausted itself on the long central space. The noteworthy features are:

(1) The hexagonal weaving in stout thong.

(2) The double loop knots about the frame.

(3) The single loops about the crosspieces, enclosing at the same time the selvage thong of the front and rear netting and the long twisted ends that form these loops.



No. 27051—Six Nations—Iroquois.

Etienne Brulé, The Man Who Broke the Trail to Georgian Bay

By Very Rev. W. R. Harris, D.D., Litt.D., LL.D.

Cool head and mighty heart was his,
Bequeathed from Norman sires.

So might he, coming safe and far,
Eschew the softening ways that mar,—

Nor man nor beast nor demon bar
His course to western shires.

Dollard, "Bells of Old Quebec."

Preamble.

Before entering upon the adventurous and romantic career of Etienne Brulé, Champlain's interpreter and pioneer of pioneers, it may be well to briefly outline the history of the Huron savages with whom he consorted for many years and by whom he was done to death and his body broiled and eaten. When, in 1615, Samuel Champlain and the Franciscan Friar, Joseph Le Caron, landed at *Outacha*, opposite the present town of Penetanguishene, the five townships, now claiming the territory between Nottawasaga Bay, Matchedash Bay and Lakes Couchiching and Simcoe, were covered by a dense forest broken here and there by lakes, ponds, marshes and streams. This great forest filled an area of approximately twenty-five miles square. There were, when Champlain canoed the Georgian Bay, almost thirty thousand Indians claiming exclusive hunting and fishing rights within this forested region.

The Wyandotts.

These Indians, who called themselves *Ouendats* or "Men of Men," had made clearings in the dense forest and on these cleared lands had built eighteen or twenty villages, with sixty to one hundred houses or cabins to a village. When these Indians entered the Georgian Bay region, what lands they came from, or how long they had lived there before Champlain's visit, no one has been able to inform us. Back into the dark night of the ages, the densest obscurity conceals all that would help to enlighten us on the pre-Cartier history of the Wyandotts.

When Champlain found them, early in the seventeenth century, they were a sedentary people living in bark villages crowded into what are now the townships of Flos, Medonte, Tiny, Oro, and parts of what is now Orillia. Their forebears having destroyed the big game in their forest, they were compelled either to abandon their lands, or become fishermen, traders and gardeners. They raised corn, beans and pumpkins for food, sunflowers for oil, and hemp for cords for fishing nets, for bundles and for trade. From the Neutral, Algonquin and the Petun, or Tobacco tribes on their frontiers they got by trade, tobacco, and skins of the moose, deer, beaver and bear, which, after the coming of the French, they brought by canoes to Three Rivers, Montreal, and Quebec, and exchanged for

knives, iron hatchets and iron arrow-tips, for swords, kettles, biscuits, raisins, cloth, and porcelain beads.

Doom of the Hurons.

In the autumn of 1646, the Iroquois of Western New York declared war on the Hurons, and, invading Huron territory through "the Narrows," between Lakes Simcoe and Couchiching, captured the frontier village of Contarea, slaughtering many of its people and making prisoners of others whom they spared for torture or incorporation into their own ranks. In 1648 the Iroquois Confederacy sent a formidable body of its trained fighters, chiefly Mohawks and Senecas, into the Huron territory. They stormed the fortified town of Teanaustaye, and, after mutilating the dead, including the Jesuit missionary, Father Antoine Daniel, burned the town and returned home dragging back troops of prisoners.

Champlain Introduces Brulé.

When, in the summer of 1608, Champlain returned from France to establish a settlement at Quebec, his ship, which was loaded with arms and stores, brought over twenty-eight colonists. Among them was a boy of seventeen or eighteen years, whom Champlain, in the report of his voyages and dealings with the Indians, repeatedly calls his *servant*. After superintending the erection of the buildings known as the *abitation* and laying out streets and gardens for his infant city, he made preparations to pass his first winter in Canada. His men were attacked by scurvy and among the remnant of eight souls who survived the horrors of the disease and the severe winters was his "servant" Etienne Brulé. When, in fulfilment of a promise he had made the year before, Champlain went to Lake St. Peter to meet and hold council with representatives of the Huron, Montagnais and Algonquin tribes, Brulé accompanied him.

When the council was dissolved and the savages were making preparations to return to their forests Brulé asked his master to permit him to go with them. Champlain willingly consented and committed him to the care of Iroquet, an Algonquin chief of *La Petite Nation* or the Little Tribe of the Algonquins of the Ottawa.

"I had with me," writes Champlain, "a young lad who had already passed two winters at Quebec, and who *desired* to go with the Algonquins to learn their language. I thought it well to send him with them that he might see the country and the Great Lake, observe the rivers, the people, the mines and other strange things, that he might report the truth about everything. He accepted the duty with pleasure."*

"Since it is your wish," replied Iroquet, "we will take the boy with us and deal with him as with one of our own; but we ask you to take in exchange one of our young men to go with you to France."†

The voyage up the Ottawa River in those days presented to the young Frenchman a panorama of scenic beauty unsurpassed anywhere in New France. The valley of the Ottawa was then a tropic paradise of gorgeous scenery, natural loveliness and exuberant beauty. The undulations of the banks of the wondrous

*When sending boys with the Indians Champlain was always careful to say that the boys accompanied the savages by their own desire. He had many enemies in Paris and feared their censure and influence against himself in case death or a serious accident overtook any of them.

† Laverdiere, pp. 368-621.

river, the teeming wealth of primordial forest vegetation, the richly herbaged sides of the dark flowing river, the wild flowers and berry plants robing its rugged slopes, its many tributaries, cascades, islands and portages, and the awesome silence of the land, presented an alluring and fascinating scene of primitive beauty.

It is impossible for us to-day to conceive the luxuriant wealth of forest, stream, lake and river which gave life to the wilderness, when this homeless boy—first of his race—canoed the Ottawa. Through the darkling woods where, side by side, rose in marvellous profusion birch, pine, maple, spruce, and hemlock, roamed deer, moose, bear and caribou and there, too, prowled the wolf, the lynx, the fox, and smaller fur-bearing animals. Here, also, in river, stream and lakelet

Chaudiere Falls, where Brulé and the Hurons offered sacrifice to the Guardian Spirit.

swarmed beavers, minks, otters and muskrats. The waters teemed with edible fish which furnished abundant life to the wild geese, ducks and loons which floated on their surface.

When the Algonquins arrived at their home on Allumette Island, Brulé discarded his French clothes and put on those of his savage companions. He passed his time hunting and fishing, bent to the task of acquiring the Algonquin language and conformed to the customs and manners of the tribe. He returned with his Algonquin hosts when they came down, June, 1611, to meet Champlain and take part in the great midnight council summoned to meet early in July on the shore of the Lake of the Two Mountains. Champlain, when recording his descent of the Lachine Rapids, says that Brulé was the first white man to shoot the dangerous waters.

Brulé with the Hurons.

In the summer of 1611 Champlain entrusted an intelligent and sturdy boy to the care of the Hurons who, after exchanging their furs at Sorel were returning to their hunting grounds on the Georgian Bay. Brulé, in all probability, went with the flotilla, for neither Champlain, Sagard, or Brebeuf make any mention of his name for four years. If Aénons, a Bear chief of the Hurons, was at Three Rivers, or Quebec, the summer of 1611, then, for a certainty, Brulé, ascended to the Huron country, for the Bear chief, publicly stated in 1633, the year of Brulé's death, that it was he who, in his own canoe, brought him to Toanché.*

Returning from the Huron country Brulé met Champlain at Montreal by appointment, July 9th, 1615, and accompanied him when he left to meet the warriors called to assemble at Lake Couchiching. The party, comprising Champlain, Brulé, three Frenchmen and ten Huron Indians, canoed the Ottawa and Mattawa and arrived July 26th at Lake Nipissing where "they met with a very welcome reception." On August 1st they returned to the Huron village of Toanché.

Champlain Enters the War Council.

Champlain's reasons for undertaking the arduous voyage from Quebec to Huronia were to visit and explore the Nipissing and Georgian Bay regions, to cultivate the friendship of the Algonquin and Huron tribes and to keep a promise he had made, the year before, to help them in the campaign they had entered upon against their implacable foes, the Iroquois of Western New York. Taking with him Brulé, as an interpreter, and eight of the twelve soldiers who had accompanied the Franciscan friar, Joseph Le Caron, when he separated from Champlain at Sorel and preceded him to the Georgian Bay, Champlain set out for Cahiague to meet the war party of Hurons and Nipissings.†

From here, accompanied by fighting contingents of Hurons, Algonquins and Nipissings, Champlain left for Lake Couchiching, from where "shouldering their canoes and scanty baggage," the naked host began its march for the Onondaga land of fifteen villages.

The party canoed the north-east shore of Lake Simcoe, portaged the forest to Sturgeon Lake which they sailed, went down the Otonabee and Trent Rivers and crossing Lake Ontario finally landed on the hunting grounds of the Onondagas.

The Conestogas.

Dwelling on the upper banks of the Susquehanna River was a Huronian tribe known as Conestogas or Andastes who formed an alliance with the Algonquins living on the eastern shore of Chesapeake Bay. The Andastes were trained fighters and were said to be stronger, swifter runners and physically superior to the Iroquois and Algonquins.

By right of conquest they laid claim to lands on the western side of Chesapeake Bay and northward as far as the hunting grounds of the Iroquois. Champlain tells us that, in 1615, they occupied more than twenty villages and that one of their towns, Carantouan, could alone muster more than eight hundred warriors. This town, by its deputies, had promised to send five hundred fighters

* Relation, X, p. 308.

† Cahiague was a fortified village of two hundred cabins, built on land near the present town of Orillia.

to co-operate with the Georgian Bay Hurons when they were ready to enter Iroquois territory. Before Champlain and the Huron warriors marched against the Onondagas, they despatched twelve men in two canoes to invite the Conestogas to meet them at a specified rendezvous in the Onondaga country. Brulé obtained Champlain's consent to accompany the messengers.

On the Way to the Andastes.

The deputies left Couchiching September 8th, 1615. They crossed Lake Simcoe and, after canoeing the Holland River, portaged to the Humber which carried them to Lake Ontario. Coasting its shores westward they entered the Niagara River, on the eastern bank of which was a village of the Attiwandarons or Neutrals, where they were hospitably received. Leaving the village in the dawning morning they moved warily "through a dark and almost impenetrable forest, wood and bush and marshy bogs; through frightful and unfrequented places and wastes," for they were now entering the lands of their enemies, the Senecas. Late that afternoon they ran into "some hostile savages (a Seneca hunting band) who were returning to their village." In the fight which occurred four Senecas were killed and two, who were captured, were led prisoners into Carantouan, a stockaded town of the Conestagas. Here Brulé and the messengers were welcomed and hospitably entertained with feasts and dances. Brulé insisted that valuable time was being wasted in feasts and that the sooner the warriors marched to the assistance of their allies, the Hurons, the surer would be the victory over the Onondagas. He contended that if they delayed much longer they would not be able to join the Hurons on October 11th the day set for the meeting. Brulé, however, could not prevail upon them to alter their conventional and traditional tribal routine. The chiefs and elders finally assembled in council and decided to throw five hundred of their warriors into the field. Unfortunately, more pow-wows, harangues and feasts had to be given and when, at last, they started and arrived at the place agreed upon, Champlain and the Hurons, after attacking and failing to capture the Onondaga stronghold, retreated and recrossed Lake Ontario.

Brulé's Explorations.

Returning to Carantouan with the Andaste warriors Brulé wintered in their town, studying their ways and habits of life and acquiring valuable information on the geography of the country, particularly the regions of central Pennsylvania. Early in March, 1616, he began the descent of the Susquehanna River and followed its windings to Chesapeake Bay. The explorer was now in the twenty-second year of his age, and, having satisfactorily carried out Champlain's orders to learn all he could of the land and its inhabitants he determined to return to the Huron country, descend to Quebec and report to Champlain. After passing a week at Carantouan he started with expert guides for the Niagara River. On the way the party encountered a large band of Seneca warriors. The Andastes scattered and plunged into the darkness of the forest and escaped, but Brulé lost his way in the dense woods. After hopelessly wandering for days, and exposed to perils and hunger, he fortunately discovered a well-worn path. Following its devious windings he saw a number of Senecas fishing in a large stream. Preferring his chance of probable death or torture to a certainty of perishing

from hunger and exposure he hailed them in Huron, a language almost identical with their own. He told them how much he had suffered from hunger and exhaustion. They conducted him to their village on the east bank of the Genesee River, gave him food and treated him with great kindness. After the women and children had examined his beard, hands and clothes, the elders of the village led him aside and asked him who he was, where he came from and why he was in their country? Brulé endeavoured to parry their questions, but the Senecas, discovering his French origin and learning that he passed through their lands in the company of their inveterate enemies, the Hurons, condemned him to be burned at the stake.

Before burning the prisoner to death they compelled him to run the gauntlet, forced him to pass through fire, tore out his beard and four of the nails of his left hand. They then stripped him for the torture. Brulé wore, suspended from his neck under his hunting shirt, a sacred amulet or relic called an *Agnus Dei*.*

An Indian noticing it, asked what it was and made an attempt to snatch it from his breast. Brulé struggled to retain it, shouting that within it was his guardian *oki* and that if they took it and killed him they would all perish. When he was ending his denunciation ominous clouds formed in the heavens and, as the victim afterwards said to Sagard; "The heavens darkened, it grew stormy all at once and sent out so much lightning and made so much noise that the savages believing their last day had come, fled away to their cabins leaving me bound and alone."†

One of the warriors, who from the beginning was opposed to the torture and death of the prisoner, now returned, unbound and brought him to his cabin, where he dressed his wounds and offered him food and drink.

Brulé Returns to Toanché.

Believing the prisoner was under the protection of a powerful *oki*, the Senecas now treated him with exceptional kindness and made him a welcome guest at all their feasts and dances. When, early in June, he expressed a wish to return to Huronia, he was escorted by Seneca guides as far as the Genesee River. From here he passed into the lands of the Neutrals and crossing the Niagara River, arrived at last at the Huron village of Toanché. After passing a year in the Georgian Bay regions, he sailed, June, 1618, with a Huron flotilla for Three Rivers. Meeting Champlain, July 7th, he recounted the history of his travels and explorations.‡

When Champlain was about to again sail for France, he instructed Brulé to return with the Hurons, explore the north and north-west shores of Lake Huron, promising him a yearly salary of nearly two hundred dollars for his services. Going back with the Hurons, Brulé settled in the Village of Toanché, opposite the present Town of Penetanguishene. From here he visited the Ottawas of Manitoulin Island and the Beaver tribe hunting in regions around the North Channel. Returning to Toanché, where Champlain had promised to meet him the summer of 1619, and failing to hear word of his chief, he once more sailed

* *Agnus Dei*—The miniature figure of a lamb, symbolizing the paschal lamb whose blood, smeared on the door posts of the houses of the Israelites the night the destroying angel passed through the city of Pharaoh, indicated the homes of the people of God. The relic was supposed to protect the wearer from all malign influences and bodily harm.

†Sagard. Hist. du Canada, P. ed. 1866, p. 465.

‡Voyages, pp. 321-361, Laverdiere.

Touché—Landing place of Brulé and Champlain, Penetang bay, cross in distance.

for Quebec, and met Champlain. We again, in 1621, hear of him at Toanché from where, with a French companion named Grenolle, he started on an exploring expedition to Sault Ste. Marie.

Brulé's Voyage to Lake Superior.

Passing the mouth of the French River, they sighted the Manitoulin and Drummond Islands, camped for a time with the Beaver Indians of the North Channel, and with the *Oumisagai* (Mississauga), who worked a copper mine.* From here they paddled westward and entered—first of white men—the St. Mary's River. Canoeing the river they then landed at Sault Ste. Marie, where they met the *Sauteurs* or Chippewas. Returning to Toanché Brulé accompanied a party of three hundred Hurons leaving for the fur market at Three Rivers. Passing down to Quebec, he met Champlain, July 2nd, 1623, and informed him of his explorations towards the Sea of the North—Lake Superior. He returned to Toanché with the Huron flotilla. Early in the summer of 1625, in the company of Sagard, the Franciscan historian, and a large party of Hurons, whose canoes were loaded with valuable furs for the French market, Brulé again visited Three Rivers. Returning to Toanché he visited the Attiwandarons or Neutrals of the Niagara peninsula and passed the winter exploring their territory.

Joins the English Fleet.

Brulé seems to have been an ubiquitous man, of a fickle nature and of unsettled habits of life. We now, in 1629, learn that he is in Tadousac, a trading post at the mouth of the Saguenay River. Here, the English Admiral Kirke prevails upon him and another of Champlain's interpreters, named Marsolet, to pilot the English fleet to Quebec.

After the capitulation of Quebec, Brulé returned to Tadousac on the same ship which carried Champlain and Father Brebeuf to the fur post. Here, Champlain, meeting Brulé face to face, gave him a merciless tongue-thrashing and pointed out to him the iniquity of his conduct in betraying his friends. He charged him with being a traitor to his countrymen, to France, and to his religion, ending by telling him: "If you, who roam around so much, be ever caught by us, you will be fortunate if you escape the penalty of your treason."† Champlain sailed for England with Kirke, but there remained at Tadousac with Brulé a Huron Indian named Louis Amantacha, who spoke and understood French, for, when a boy he was brought to France where he lived for a year and had been treated kindly. This Louis was present when Champlain charged Brulé with treason to the French, the friends of the Hurons. His statement afterwards was the death of Brulé.‡ Brulé returned to Toanché to live with Aénons, headman of the village, and was with him when De Caen came to Quebec, July, 1632, to restore the French regime in Canada.

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* "About eighty, or a hundred leagues (263 miles) from the Hurons, there is a mine of red copper, from which the interpreter Brulé showed me a large ingot when he came back with a man named Grenolle, from a voyage he made to the natives." Sagard, Hist. du Canada, p. 716.

† Voyages, VI, p. 267, *et seq.*

‡Louis Amantacha declared that Brulé was no longer looked upon as a Frenchman, because he had left his nation and gone over to the English." Relations, Vol. V, p. 241.

Pitiable End of Brulé.

Now that the French were again masters of the country and the fur market at Three Rivers was re-opened, the Hurons began to investigate the rumors and gossip bearing upon Brulé's treason against Champlain and their allies the French. While Quebec was in the hands of the English the Hurons remained neutral, but now, that the English had retired, conditions were changed. If Brulé had any presentiment of impending disaster or approaching death, he made no attempt to escape. The members of the Bear council were secretly called together at Toanché to which Louis Amantacha, a member of the Cord tribe, was invited. When questioned he repeated what he had seen and heard at Tadousac where Champlain, in the presence of Echon (Brebeuf), accused Brulé of treason.

Aénons, now war chief of the Bear tribe, said that Champlain and Echon were and had been staunch friends of the Hurons. He contended that Champlain would soon ask why his friends the Hurons, especially the Bear clan, harboured his enemy and the enemy of the French. Brulé, he asserted, when betraying Champlain betrayed the members of the Bear clan who were now called upon to vindicate themselves. Echon was sure to return to them and Champlain might possibly accompany him. How were they going to explain their hospitality to Brulé, the friend of the English, who were allies of their deadly foes, the Iroquois.

*Brulé was condemned to death by the council as a traitor to the French and as an ally of the English and the Iroquois. After the execution of the sentence, June, 1633, his body was broiled and devoured by the savages. Thus perished the dauntless voyageur, Etienne Brulé, the first white man to canoe the waters of Lake Huron, ascend the St. Mary River, and stand upon the shore of Lake Superior. Toanché, where his bones were interred, was built on land very near Otoucha, opposite Penetanguishene, where a large cross stands to-day marking Champlain's landing, August 1st, 1615. He was killed in the prime of his manhood, in the thirty-seventh year of his age. He was the first of his race to make the voyage from Quebec City, through the province of Ontario, to the Georgian Bay, the first to sail Lake Ontario and visit the Niagara Peninsula, and the first to cross over Northern New York and descend the Susquehanna River, passing through the states of Pennsylvania and Maryland, and touching Virginia soil.

†Soon after the death of Brulé an epidemic carried off many of the inhabitants of Toanché, and when a *shaman* or medicine man of the tribe declared he had seen the ghost of the sister of Brulé flying through the forest and hovering over Toanché, they burned the village, moved inland from the bay about two miles

* After a close examination of the "Relations of the Jesuits," Sagard's "Histoire du Canada," Champlain's writings, Father Jones' "Old Huronia," and especially Dr. A. F. Hunter's "Huron Village Sites," we are satisfied that the skull and bones of Etienne Brulé were buried somewhere in Lot 1, 17th Concession of Tiny. It is possible that, according to the custom of the Hurons, his weapons, pipe, etc., and, perhaps, a small metal cross, were placed in the grave with his remains.

† Gabriel Sagard, writing of the death of Brulé, says: "At least, the unfortunate Brulé was condemned to death, and, after his death, his body was eaten by the Hurons, for whom he, for a long time, acted as interpreter. They murdered him for some hatred they, for a long time, held against him, for I know not what reason or for what fault he committed against them. . . . For many years he dwelt with them, living as one of themselves, acting as their interpreter with the French, and after all his services his only reward was a miserable death and an unhappy and deplorable end. I pray that God, if it be His holy will, may have mercy on his soul." Hist., Vol. II, pp. 431-432.

and built Teandeouiata where Father Brebeuf dwelt when he returned to reopen the mission to the Hurons.

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Contareia or Kontarea or Contarea and St. Jean Baptiste Mission

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Contareia.

The site of the Huron village succeeding the bourg Cahaigue, visited by Samuel de Champlain in 1615 in the months of August, September, and December of that year, is and must be located somewhere on the main trail now known as the Coldwater Road, near a little lake. The first step is to locate by field work, (i.e., the finding in situ) the remains of an Indian village that lay near a little lake, near or on the main trail or highway of the Hurons, distant from the known point of Ihonitiria, where Père Brebeuf lived and laboured in 1636, about eight or ten leagues. In the Relation of 1636 this town or bourg of Contareia* was described as the last of the Huron towns, distant a day's journey from the nation of the Bear, among whom the Jesuit Fathers were living at that time and "the principal bulwark" (see Rel. 1642, p. 74, col. 1) of the country, and must of necessity have been situated on or near the main trail (Coldwater Road), on the frontier most exposed to the incursions of the Iroquois. It is a well known fact—the route followed by the Iroquois in their raids—which all centred at what is now known as the The Narrows, between Lakes Simcoe and Couchiching, and naturally these raids would follow the main road or trail into the Huron country, this trail being well established as the Coldwater trail, between the last-named lakes and the Mer Douce (or Georgian Bay) and Lake Huron.

This town, Contareia, the successor of Cahaigue, must needs meet all of the above points (1) A principal bulwark, Rel. 1642, p. 74, col. 1. (2) Near a little lake. (3) Near or on the principal highway. (4) In the Arendaronnon country, and (5) In a commanding, defensible position on or near the trail. This village, one of the Arendaronnon villages must have been in the known country of this tribe of the Hurons which lay to the east and south-east by east of the habitat of the Bear Nation: (see Rel. 1640, p. 90, col. 1) commencing "Les Arendaronnons font vue des quatre Nations qui composent," etc. This entry also assigns to the missionary work—Les Peres Antoine Daniel, et Simon le Moine, the first of whom afterwards died his glorious death as a martyr at the mission near Mount St. Louis in Medonte Tp., Simcoe Co., in July, 1648, after fourteen years' ungrudging service as a missionary among the Hurons. Now—to go back to the field exploration to prove the theory as to the site of Contareia. The main highway, the Coldwater trail, being an accepted fact—the question at once arises—where does this trail touch or impinge on "a little lake?" Are there Indian remains such as ash heaps, mealing stones, and the usual debris, to be found on the village site there?

This Coldwater trail abuts on "a little lake" (Bass Lake) in the township of South Orillia: there is a village site, Indian, almost on the trail (Coldwater).

* The meaning of the name is—"There is a little lake there" or "Where there is a little lake."

There are, or were, five beautiful mealing stones on the lake shore immediately in connection with this village site, one of which has eight grinding places, well developed; two others with two (at least) grinding places, and three others with one grinding place. One of these mealing stones was removed to the Provincial Museum during the last summer. The bottom half of this stone weighed over 800 pounds. Still perceptible are the corn grounds of this village site (still closely in touch with the little lake and on the main trail) and, in conclusion, the depth of the ash-beds is an absolute proof, without more, of the thickly inhabited village site, large in comparison with the others nearby. Was this village site defensible according to the Indian knowledge of the time? This site is situated on a hill sloping steeply in a north-westerly direction from the known trail; this hill is of a considerable height above the trail and easily defensible, with the corn grounds extending in a westerly direction from the village site and away from the trail. The ash-heaps of the village site, being many in number and of great depth, show clearly even to-day that the site was an old established one. While the refuse heaps yield all of the known remains of a pre-historic village, such as broken pottery sherds, broken pottery pipe heads, bones, beads (shell), and all remains such as an archæologist would expect to find on such a site, there are very few remains of a French character, such as iron axes, metal arrow-points, etc. The corn grounds in connection with this site are extensive. In the forest adjoining, that has grown up since the destruction of the village, the corn hills are easily traceable in the earth, and, finally, within two or three miles, still following the trail from the site, is a large communal burial pit or more than one. Was this site that of Contarea (the principal bulwark) as described in the Relations?

The Jesuit Relations, the only written history composed and written by those priests or missionaries who were in the country, living or trying to live with these Arendaronnons, or Rock Tribe of the Hurons, give the only reliable geographical description. These Relations point indirectly to the actual site, the almost forgotten bulwark of the fated Huron Nation. True—the missionaries' continuous efforts from 1636 to 1642 in converting this village were a failure—true also, the inhabitants of Contarea were of the Arendaronnon people. The bulwark against the raiding Iroquois, as said above, started from the Narrows between Lakes Simcoe and Couchiching into the Huron habitat, following the only known trail and established highway, until finally running into the Georgian Bay near the now village of Coldwater and Tiny township, had ceased to exist in 1647-8.

If this site was more prolific in the remains found on one of these ancient village sites—if this site had these immense mealing stones—not easily moved—if the site was, in short, defensible itself while defending the known main highway—and an apparently old site—if the site was a large one with well developed corn grounds—then another of the uncharted sites can easily be placed on the farm of one Regan, namely, parts of Lots 4 and 5 in the Second Concession of the Township of South Orillia, in the County of Simcoe.

One of the reasons that this village, Contarea, was not given prominence in the Jesuit Relations was simply because the inhabitants of this village refused to permit the teachings of the Jesuit Fathers or acknowledge the doctrines of the Christian Religion—though in the Relation of 1658, p. 10, col. 1, reference is made to the captive Hurons of Contarea, which refers to the complete wiping out

by the Iroquois of a Huron village whose name is not given but which was remarkable for its impiety.

In the Relation of 1642, p. 74, col. 1, reference is also made to Contareia concerning a false alarm of an attack on this place in the winter of 1641-1642. This alarm was, in the following year, 1642, to prove only too true, as this place was utterly destroyed by the Iroquois shortly after the sending the Relation of that year.

*Quoting the exact words of the Relations, 1644, p. 69, col. 1, "C'estoit le bourg le plus impie et le plus reuolte contre le veritez de la foy de toutes ces countrees, et qui plus, d'vns fois auoit dit aux Peres qui les alloient instruire, que si tant est qu'il y eust vn Dieu vengeur des crimes, ils le defioient de leur faire sentir son courroux, et qu' a moins que cela ils refusoient de recognostre son pouuoir." It is apparent that the Jesuit Fathers had no success as missionaries in this bourg of Contareia, for, as above quoted in the 1656 Relation, those inhabitants of Contareia had never been instructed in the doctrines of the Christian religion at all. (See "Relation," 1656.)

If Contareia was "a principal bourg or bulwark of the Huron Nation against the ever-dreaded Iroquois" (1) it must have been near or on the main highway into the Huron country; (2) it must have been near or on a little lake; (3) it must have been in a defensible position as far as the crude means of defense at the command of those Indians went; (4) it must have been in a commanding position on the trail; (5) it must have had extensive corn grounds, and a number of mealing stones in connection therewith—and finally (6) the ash-heaps and refuse heaps in connection with the village site, as well as the communal burial pits of the village, must have been numerous.

†Does this site, as compared with any other nearby, meet all of these requirements? If so, and the writer asserts that the field exploration abundantly proves all this, the statement can safely be made that Contareia is a fixed and found place, situated on parts of lots four and five in the Second Concession of the Township of South Orillia.

As to Father Daniel's life and death, see Rel. 1649, p. 4, col. 2. "He always carried his life (ame) in his hands, having resided more than nine years in those places in this country which are nearest the frontiers, and in the missions most exposed to the enemy, awaiting with hope and supernatural love the death which fell to his lot."

‡The term "Plus de neuf ans," taken strictly, would extend from the day of his death, July 4, 1648, to a date somewhat earlier than July 4, 1639. His superabundant piety was attested by his ungrudging labours among the Hurons: "thus passing his days on the frontier always in the stirring life and peaceful associations of the Christian missions, the worthy ecclesiastic passed from the scene of his earthly pilgrimage in the holocaust of flame of the mission of St. Joseph II in the year 1648, on July 4th, the first fruits of the elevation of the Huron missionary to be with his Master." Using the words of another historian, "He was a truly apostolic man. A great teacher of Christianity and humble follower of his Master. Jealous of the glory of God, a friend of evangelical poverty, most true to the teachings and observance of the rule of his order and zealous in the conversion of the heathen Hurons."

* Rad. Hur. p. 294, col. 2.

† Potier—p. 295.

‡ Jesuit Relations as herein quoted from 1636 to 1658, particularly Rel. 1641, 1642, 1644.

St. Jean Baptiste Mission.

The first essential to establish the site of this mission to the Hurons, is an intimate knowledge of the country itself, and of the whereabouts of the parent stock, (the Arendaronnons), and of the villages and bourgs of this people, from which the missionaries (the Jesuits) drew their converts, at the time of the establishment of this mission by Pères Antoine Daniel and Simon Le Moine, between the years 1636 to 1642, mentioned in Rel. 1640, p. 90, col. 2, as established by the above missionaries after their expulsion from Contareia hereinbefore and hereinafter referred to.

In Rel. 1640, p. 90, col. 1, under the heading of the above, Père Jerome Lalemant, Superior of the Huron missions, says: "The Arendaronnons constitute one of the four nations which, strictly speaking, are called Huron. It is the most eastern of all. It is where (referring doubtless to Cahaigne, the people of which removed back to Contareia) Monsieur de Champlain sojourned the longest on his journey up here some twenty-two years ago (more correctly twenty-five years ago) and where his great name is still a living remembrance in the minds of these barbarous tribes," and again at page 76 of Huronia, in the same Relation, p. 90, col. 2, Father Jones, speaking of the mission, says, quoting the Rel. above: "Ils firent leur premiers demeure et la plus peuple, etc., St. Jean Baptiste."

St. Jean Baptiste mission was a palisaded town, (Contareia was not, at least no traces remain of the embankment), situated not far from a lake—see Rel. 1640, p. 92, which runs thus "Certains supposts du diable confirmoient toutes ces medicances, assurant auoir en songs des robes noires, maintenant hors la palissade du bourg, ores sur le bord du lac, qui deueloppoient de certains lieures d'ou sortoient des estincelles de ieu, etc." . . . Some agents of the devil gave consistency to these calumnies by asserting that they had seen in their dreams black robes, now busied without the town and anon on the lake shore, busied turning the leaves of certain books, whence sparks of fire shot out. . . .

These stories gave rise to the revulsion of feeling of the parent village or bourg of Contareia against the missionaries, and compelled them to remove from this place, Contareia, and to establish the mission of St. Jean Baptiste away from and across the Coldwater trail on the east of the bay of the little lake (Bass Lake), but still in touch with and commanding the trail, and in sight of Contareia. Quoting from Huronia (Jones) "the fathers were reciting together their breviary and as they turned the leaves the sun struck on the gilt edges, and glinting rays, together with the movement of their lips, were taken for spells and enchantments or incantations."

Again, in 1648, p. 49, col. 1, quoting from the Relations "Les Arendaronnons, qui estoient a nos frontieres vers le coste de l'Orient que nous appellons la Mission de Saint Jean Baptiste, ont recutant d'eschec ces dernieres annees qu'Ils ont este constrains de quitter leur pays, trop expose a l'ennemy, et se retirer dans les autres Bourges plus peuples qui sont ausside meilleurs deefense." According to Pere Raguenneau, Superior of the Mission for that year, this migration took place either in 1647, or 1648: "the bulwark of the Hurons on the main highway into the country had ceased to exist."

Both Father Martin and the historian Parkman say that the St. Jean Baptiste Mission and Contareia were in one and the same locality.

In the Relation of 1640, p. 94, col. 2, reference is made to this mission, stating that, four years previously, the Algonquins had been located there, and in this

year, 1644, this winter encampment of the Algonquins was near St. Jean Baptiste, and the distance is given in the following page, col. 2, as follows: "quoy que ces cabanes Algonquines fussent eloignees du bourg de St. Jean Baptiste vn quart de lieue de tres mauuais chemin," and in the Rel. 1640, p. 94, col. 2. "Vn capitaine des Algonquins qui hieurent a vn demy quart de lieu d'ici, nous vient chercher en haste," etc.—the "d'ici" refers to St. Jean Baptiste, as can easily be seen in referring to the heading of the chapter on page 90 (same Relation).

Taking into consideration the contour of the country, as well as the prime reason—the near supply of their food, the wild rice and fish of the Narrows between Lakes Simcoe and Couchiching, and the mutual protection of these allied Hurons and Algonquins against the dreaded Iroquois raids along the Coldwater trail, we see the cause of these migrations of the Algonquins near the settled habitations of the Hurons each winter. These sites must have been on or near the main trail, and could not have been situated elsewhere if they were as quoted "the bulwark of the country." Again, adopting the reasoning from the missionaries' viewpoint, it would be reasonable to suppose that the missionaries would go where the greatest amount of their people could be met with, both Algonquin and Huron, which would naturally be at their villages on the frontier, in the Arendaronnon country.

The Jesuit Relations, and Potier the historian, give the meaning of Contareia, which was on the main highway, known locally as the Coldwater trail, from the fishing place to the Mer Douce (Lake Huron). Cahaigue had been on this trail. Contareia was on this trail. St. Jean Baptiste Mission (on the opposite side of the road, a short distance removed from Contareia, and in plain sight of that "bulwark of the country," and guard of the trail for the whole Huron country and the missions as well) situated towards the Mer Douce. As mentioned before, this mission must have been (with Contareia) situated somewhere along the frontier most exposed to the incursions of the Iroquois. On this, the Coldwater trail, there were only two mission strongholds (Huron) that could lay claim to the distinction, one, the St. Jean Baptiste Mission, with its neighbouring village of Contareia, and the St. Joseph II Mission at Teanaostiae, farther back in the country, in Medonte Township near Mt. St. Louis P.O.

Once the site of Contareia is established, together with the surroundings, including the mealing stones, five in number, on the Bass Lake Shore, situate (as both the Mission and Contareia were), in commanding positions "near the little lake," it is submitted that there can be no longer any doubt as to their position relative to the little lake. The missionaries at St. Jean de Baptiste Mission were apparently observable from Contareia, and their actions and motions watched and criticised by these inhabitants of Contareia and commented on—their visits to the shore of the little lake, the reciting of their office, etc., all of these things (if the lay of the country bears the thesis out), give the situation of these two places. The trail (Coldwater), just before striking Bass Lake, coming from the fishing place (the Narrows), runs down a steep hill, on the crown of which is the site of Contareia, on the west side of the trail, thence to and along the westerly shore of Bass Lake, the shore of the lake being quite visible from this site. Across the trail from Contareia through a deep valley, and on a hill on the eastern side of the trail before reaching the lake, the little bay of which runs into Orillia Township—one would naturally look for evidence of the mission site, for, from the Mission, the Fathers went to the shore of this lake or bay, at which, in solitude and quiet, they communed with their Master, discharging

their daily duty as they saw and knew it—hence St. Jean Baptiste Mission must have been closely in touch with both the lake and Contareia, in plain sight from Contareia, and closely in touch with the Coldwater trail.

If the reader will refer to Rel. 1656, p. 10, col. 1, he or she will find the derivation of the name Contareia—it means "there is a little lake there" or, "where there is a little lake." The Relations nowhere give the Christian name of Contareia, but the inhabitants of this bourg or village were described as incurable non-believers and rejectors of the missionaries and their belief, so much so that they (the missionaries) were expelled from the village of Contareia, taking with them to the mission, to be established by them, their converts—this was prior to and about the time of the establishment of St. Jean Baptiste Mission and about the years 1640-1642.

So that these redmen, inhabitants of St. Jean Baptiste Mission, who were once inhabitants of Contareia, still could be looked on by the Hurons generally as "the principal bulwark" against the incursions of the Iroquois, seeing that both Contareia and St. Jean Baptiste Mission commanded the trail and entry port of the Huron country via the Coldwater trail.

The large number of mealing stones collected at the head of the little bay of Bass Lake, almost between the two village sites, shows that there must have been a large population of settled inhabitants; the size and weight of the lower halves of these stones prove also that the moving of these stones must have required quite an amount of manpower to assemble them at one central point, and the fact (as given in the Relations of the missionaries) of their being in plain sight outside of the palisades of St. Jean Baptiste Mission, proves that the mission must have been in close touch with Contareia. The indestructible evidence of the mealing stones, in plain view of each site, shows that the mealing stones were used in common. The sizes of these stones was immense, one rescued from this site last fall weighing some eight or nine hundred pounds, having eight well-defined grinding places on its face. There are still four others left in situ, all good samples and large, except one, which has a single grinding place but very good.

The late David Boyle, sometime editor of the *Journal*, and the writer spent some days in 1904 in and about these two sites, contributing what knowledge we had to solve, if possible, the enigma of the site of St. Jean Baptiste Mission, and he at that time was convinced that the above written solution of the difficulty was the correct one. Spending, as we did, one week in steadily combing all the ground between Lake Simcoe and Bass Lake at the Coldwater trail, examining each village site and comparing same with the requirements of the Relations themselves, we eliminated each one as the investigation proceeded until the last one, as quoted above in a former part of these notes, was reached, which site met every requirement and point raised, with exactitude. This place, and this only, could be the site of St. Jean Baptiste Mission and Contareia, they being originally, before the dissension, one united village and people. From Contareia the converts and their teachers moved across to the mission site on the neighbouring hill, being still in close touch with the trail, and the little lake, and the mealing stones.

From these two sites they were driven back to St. Joseph II or Teanaostae or Teanaostaiae, in the Township of Medonte, close to the present village of Mount St. Louis, in the County of Simcoe, in 1647 or 1648.

Translated.

DR ROWLAND B. ORR,
Director, Provincial Museum,
Toronto.

Dear Sir:—

I have read with very great interest the articles of Dr. Harris on the ruins of the prehistoric cities of Mexico, Yucatan and Honduras, which appeared in the Ontario Archæological Reports that you did me the kindness to mail to my address.

Allow me to correct a few errors in these scholarly papers and to add to the essays a supplement in the form of an article on the cryptic symbolism and meaning of the glyphs of Xochicalco, Mexico.

Possibly Dr. Harris, who has visited so many of the pre-Columbian monuments of my country, will translate for your report the manuscript I am, this morning, posting to you. Renewing the expression of my admiration for the excellence of your Archæological Reports, I am with respect and esteem,

Sincerely and humbly yours,
ENRIQUE JUAN PALACIOS.

MEXICO CITY,
December 29, 1920.

N.B.—Professor Enrique Palacios, whose article is incorporated with our report for 1920, is one of the most eminent and outstanding authorities on the Palæontology and Archæology of Mexico and Central America. His article on the hieroglyphics on the monument of Xochicalco will be read, we are satisfied, with great interest by all who are students of the aboriginal past of the American Indian.

What The Hieroglyphics of The Great Monument of Xochicalco Say

By Professor Enrique Juan Palacios.

Translated by Dean Harris.

Two things are so closely bound up with Toltec tradition that they cannot be dissociated from it—the system of chronology which conformed closely with the cosmogonic conception of the world—and the figure of Quetzalcoatl. Whether the Toltecs invented the chronology, or whether they got it from some other source is uncertain, but all chroniclers are agreed that the Toltecs perfected the calendar, and also that they gave a particular worship to Quetzalcoatl.

We will not now treat of the origin of the symbol in question except to say that it was marine, because at times it is represented as being surrounded by snails and shells. There are circumstances which lead us to believe that it was originally conceived in some place east of the Valley of Mexico—the Toltecs or Olmecs brought it from there, adding to it an extraordinary splendour.

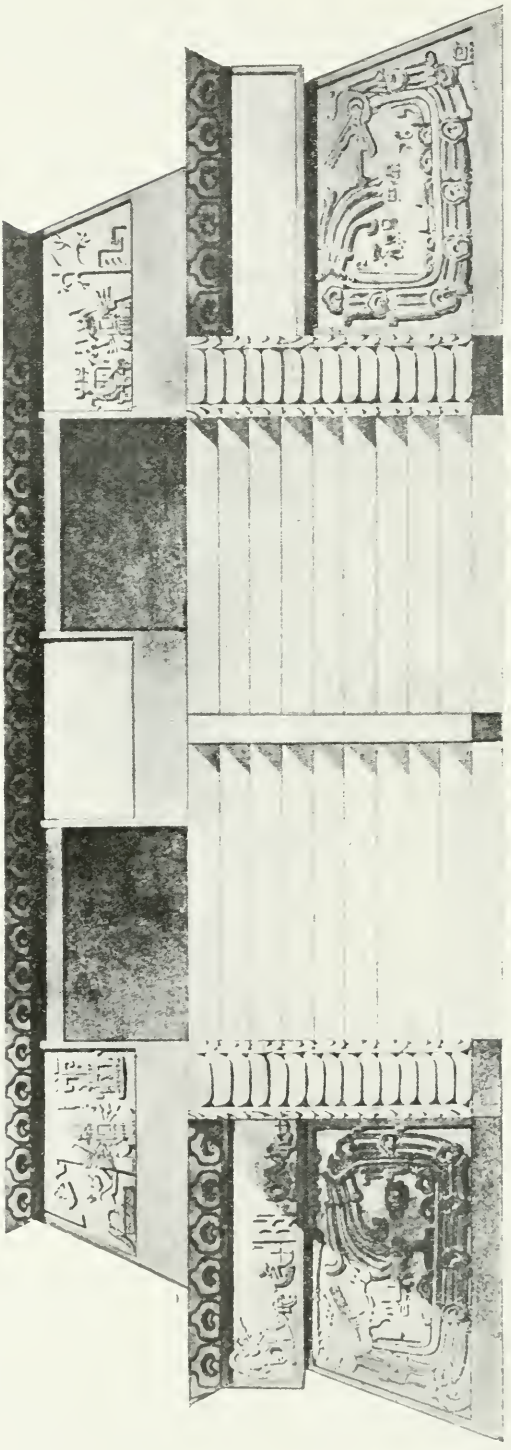
Moreover, Quetzalcoatl and the chronologic cosmogonic system have an intimate relation, for this god is symbolized also in the planet Venus, the "beautiful twin" (another metaphoric meaning of the word) that star whose movements, ingeniously combined with those of the sun, form sacred cycles, which, in their turn, constituted a base for the periods into which the Toltecs divided the history of the world. These cycles were principally those of 52, 104, 208, and 416 years and appear represented on many important monuments of Yucatan and Mexico. (the huge stones brought from Tula, the mausoleum of Chichen-Itza, the obelisk of Tenanco, Xochicalco, etc., etc.).

The Vatican manuscript, 3738, a drawing made in the 16th century in accordance with originals of absolute authenticity, shows that the existence of the universe is divided into four great epochs. The three first were destroyed by the action of the natural elements (water, fire and air) but the fourth is not considered finished. The natives regarded it as an historical era and supposed it to be presided over by the beautiful goddess, Xochiquetzalli, goddess of the earth, of flowers, and of prosperity and happiness. The drawing expresses it very clearly: adorned with bouquets and wearing rich clothes, the deity descends from the sky to offer her gifts to man, who is roaming through the world with an air of happiness.

An error of the interpreters has led to the belief that the aborigines imagined the fourth catastrophe as conceivably a fifth historic sun: the Toltecs (and also

The ruins of the ancient Toltec temple of Xochicalco are about eighteen miles from the City of Cuernavaca in the State of Morelos, Mexico. Mexican antiquaries have not settled whether the remains are of a city, a temple or a fortress. The ruins surmount a rocky eminence nearly two miles in circumference, but the most important remnant left of this Toltec city, fortress, or temple is a *stone building* which measures seventy-six by sixty-eight feet. Xochicalco is about 5,000 feet above sea level. Xochicalco was called by the Aztecs "The Hill of Flowers." The buildings are, like the great Pyramid of Cholula, probably of Olmec or Toltec origin. Forty miles to the south are the famous caves of Cacahuamilpa.

W. R. H.



Southern ascent to Xochicalco (restored).

the Aztecs, heirs to the same culture) thought they were living in the fourth epoch of the existence of the universe. The fifth sun is incorrect. But although not yet ended, the last era also was destined to be completed and this must inevitably occur after a lapse equal to the duration of the first ages.

What was this period? The interpreters are not agreed on this particular, but Ixtlilxochitl, whose information rests on ancient drawings and on the data of the native connoisseurs, removes all doubt by giving us a figure which coincides exactly with the great figure on the monument known as the Stone of the Calendar, a coincidence which cannot be the result of chance, especially as the historian had not the slightest knowledge of the obelisk, still buried.* Ixtlelxochitl (Relaciones, p. 14) affirms that the first three epochs lasted 4,992 years; moreover, the analysis reveals that this number is composed of three equal periods of 1664 years, in their turn composed of four cycles of 416 years, which is the period carved on the facades of Xochicalco, the Great Stones of Chichen-Itza, and the Stone of the Calendar.

The fourth age of the world would last at least another 1664 years. We are obliged to observe here that the philosophy of the aborigines, and even their social organization, was largely formed from the study of nature, as Zorita, Bandelier, Mrs. Nuttall and other investigators have shown.

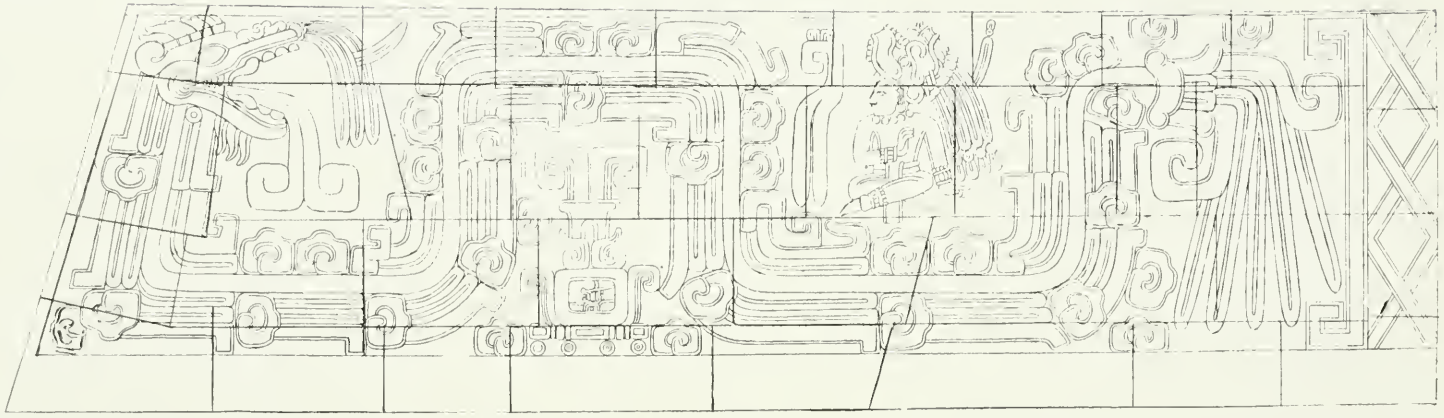
We will now endeavour to prove that the monument of Xochicalco expresses precisely these ideas. Its hieroglyphics refer to the successive divisions of the history of the universe, and the whole figure with its facade represent the fourth or present epoch ruled over by the goddess of flowers, Xochiquetzalli. This explains why the temple bears the name of Xochicalco and why the statue of the ancient divinity formerly crowned it. This statue still exists in the neighbouring village of Tetlama.

At the same time the facade contains the number of feasts, corresponding with the time that the builders (when they were constructing the edifice) judged as having passed from the third to the fourth age of the world. Our study, based on a first hand examination of the structure (I visited it personally in 1911), is in agreement with the most trustworthy antecedents and the opinions of all men of science worthy of the name.

The edifice of Xochicalco is composed of two walls, the same as it originally possessed. Although of the larger there are hardly any remains, still there is enough for us to form a conception of the elements which composed it. On the second floor, or it may be the lower one, each side represents two serpents or bodies of Cipactli, as they were accustomed to call them. The original significance of the character, which was not understood until lately, is that of a period of time, and a good proof of this is found in the interpretation of the "Codice Borbónico; such figures, hewn in great blocks of basalt fill the whole wall. Coiling in a majestic line from head to tail they join their tail feathers, making from these extremities a sign of the calendar which occupied at least the middle part of the respective facade. (We are indebted to Dr. Ramon Mena for the identification of this sign.)

From the enormous mouths of the monsters—marvels of art—comes a great length of forked tongues, symbols of the two kings represented in the conception. Afterwards we will see that it refers to a period of time determined by the move-

* Fernando de Alba Ixtlilxochitl (pronounced Isht-lil-shot-itte), was an Indo-Spanish historian, whose writings are often quoted by Mexican authors.



Part of central facade of a building of Xochicalco. The double volute, corresponding to the ninth fire, represents the sign of Atadura (52 years), with its four numerical points.

ments of two stars. Each serpent presents, distributed irregularly over its body, following the unfolding of its coil, 13 figures of an outline very similar to a snail. It represents, in fact, the jewel (?) of Quetzalcoatl used in a form which denotes one of the properties of the motion of the planet Venus (the property of which its synodic change of position, presided over by only five signs of the Tonalamatl, agrees with the solar calendar) recording at the same time the origin and marine attributes of Quetzalcoatl.

The serpent, being a general allegory of the times, corresponds to the 13 arches denoting in this case the concrete value of the cycle symbolized in the Cipactli. Each snail represents the period which the planet took to recover a position which it formerly had in space, that is five years of the Venus system. Because after this lapse, the years of the star estimated at 584 days, Venus attained in the celestial vault a position, not identical, but very near that which it had occupied 2,920 days before. The arches consequently represent 65 years of this kind—it completes the development of the calendar of Venus and is equal to 104 solar years, which was the century of the aborigines. The first is true because then only the Cipactli, affected by the numeral 1 returned to, coincide at the beginning of the Venus year—the second is true because 65 periods of 584 days equal 37,960 a figure equivalent to 104 solar years, if these are estimated at the rate of 365 days as the original natives of ancient Mexico counted them. So far we have reached a beginning of the interpretation confirmed by comparative analysis with page 72 of the Borgian Code (with regard to which Dr. Seler, always so wise and prudent in his assertions, ventures the hypothesis that it may represent a longer period of time). There appear on this page four monsters representative of the 104 years which agree with the two serpents on the Great Stone of the Calendar. It informs us of the interpretation of the century by the aborigines: and the monster of Xochicalco shows a double tongue, because the cycle shows not only the apparent course of the sun for 37,960 days but also the course of the star, Venus (or the god Quetzalcoatl). The tongue expresses light in the symbolism of nature.

As corroborative data we may add that the aborigines celebrated the great feast Atamalqualiztli every 2,920 days (5 years of the Venus or 8 years of the solar system) the chronological value of which we may attribute to the snails of one body of the Cipactli. Sahagun is the one who proves it. There are then, positive data to sustain the opinion here given, and we insist that the 13 signs, that is to say, the inscription on each figure, compose exactly a century of 104 years. This certainly is not a simple coincidence.

Adjacent to each Cipactli a second series of pentagonal arches may be observed in Xochicalco. They are found irregularly distributed, but they add, in all, another 13 arches close to each monster, although the figure appears a little altered on account of the ruin of the building and the restorations badly planned. The presence of this new series cannot be merely casual: it treats, we believe, of another 65 Venus years having relation to each Capactli, that is to say, the monster represents 208 solar years and the two monsters of each facade 416, which compose 130 and 260 of Venus years. We must insist on the importance of this perfect chronological agreement which could not help impressing even the aboriginal astronomers. The star exercised the power of a kind of regulator for the sun (Jonghe has indicated it) and it was natural that the natives should reverence profoundly beings thus materialized, considering them creators of time and chronology. The monster is a double being, hence its forked tongue and

North panel of base of monument (restored).

arches adjacent to those of its own body. There are two tongues, two beings, two stars and but one chronological cycle.

The first principal part of the building expresses therefore 416 solar years or 260 Venus years. The last is a sacred number because the Tonalamatl consists of 260 days. Now, it is clear why this era appears in many of the most famous monuments of the ancient civilization of Mexico and Central America. Let us now point out the probable motive which gave it origin. The era is a product of the elements of the system and the study of true astronomical phenomena. The synodic change of position of Venus not having an exact value of 584 days but 583 days, 22 hours 6 minutes and 14 seconds, or perhaps 583.924. The result is that its calendar loses 5.20 days in proportion to the real phenomenon at the end of 37.960 days. In other times the star occupied a position identical with that which it held in the sky at the beginning of the century (at its early rising, for example) when only 37.954.84 days had passed, that is, its calendar had gone back although but little more than five days in relation to the movement of the star. This does not signify that the system of computing in 584 days the revolution of Venus is false, neither is he wrong who claims that the natives reckoned the solar year at 365 days. Because, in spite of the discrepancy of 5 days all the *huehuetiliztli* or centuries of the Indians had the common property at least during 1,040 years (and Senor Paso y Troncoso is the one who remarked this) of being presided over in the beginning by the planet occupying the same zone in the sky, e.g., the morning star; they would not only vary their digressions or degrees of separation from the sun but they would keep a certain fixed proximity in the heavens at the dawn of the era. And this was what interested the Indians —to see the star at the same position in the firmament at each return of the date. Now, the fact that the retrogression in the Venus calendar was approximately 5 days, at the end of the century, invited a simple correction which could not have escaped the priests, to suppress 5 characters in the series. The result is that if the years of the star had begun during said century by the symbol Cipactli, Coatl, Atl, Acatl, and Ollin, in the second era there would be another 5 initial characters. In the following century the same fact would be verified and the same again in the 4th, and thus the omission of a full twenty days. From this, two things follow—that all 20 are to be reckoned with at the beginning of the year of the Venus calendar (a suggestion which comes from Mrs. Zelia Nuttall) and that this discrepancy is corrected in respect to the movement of the star. The next century, or, better, the following long period of another 416 years—can start again under Cipactli. The correction re-establishes harmony between Venus and its calendar each time that, this period being passed, the star makes a positive advancement of less than 216 days with relation to the calculation of 584 days; leaving out then, 20 days the star and its calendar can start together again. Instead, the solar calendar computed at the rate of 365 days gains in respect to the apparent movement of the star. In other terms, the 151.840 days of the great period would have concluded their course when the sun lacked 100 days to return to a definite position (the winter solstice and spring equinox for instance) but as 100 days are exactly 5 times 20 the phenomena offered the singular coincidence that after 416 years of 365 days had passed it was simple to correct the discrepancy aggregating the five 20-day periods in the calendar, from which it follows that the new period again begins with the same sign, be it Cipactli or Acatl. This double and harmonious rectification

explains the importance of that great cycle and its effective use by the natives, of which there is no possible doubt. It gives the reason why in the stone of the calendar, the Borgian and Vatican codes, the colossal stones, the obelisk of Termanco and the mausoleum of Chichin-Itza, Xochicalco and other monuments, we meet the symbols which represent it.

The uncertain years of 365 and 584 days respectively present the notable property of lending themselves to the simultaneous arrangement of the solar and Venus calendars because they possess a common cypher which is that of 37,960 days for the century or rather 151,840 for the great period. Such cyphers are multiples of 13 as well as of 20, both factoral numbers of the sacred book, (the Tonalamath) a circumstance which beyond doubt influenced the adoption of the above mentioned cycles.

Proven then that the years of 365 days and 584 days are the only ones which can serve as a link to associate (with indispensable corrections) the movements of the two stars in which the natives saw their supreme gods, the prominent importance which the great cycles had in the eyes of the native is explained. But even if we cannot justify their utility, it is undeniable that the two gigantic monsters on each facade of the building in Xochicalco with their own 13 arches and the 13 adjacent ones, denote the great cycle of 416 years. Confirming it with the greatest clearness, there are dates here in every form expressing the period. We speak of the notable emblem carved between each undulation of the Cipactli. All archæologists have reflected on this figure (which appears six times, two for each one of the east, south and north sides of the monument) without so far anyone understanding its true meaning or significance. Only Seler advanced the hypothesis pertinent to our subject matter, that they may be referred to the eras that the aborigines assigned to the world.

The signification is very simple and understandable. It treats of the symbol of fire expressly denoted by flames and volutes; in the inferior part, a connection restricts it, or it may be, the sign of the Xiumolpillia, 52 years. The boundary is affected by four numerals which its value of 208 years obviously determines: this is probably the meaning of the detail confined in a double frame placed between the flames and the Xiumolpillia which gives us a knowledge of a new pre-Columbian hieroglyphic. The figure is composed altogether of four double volutes or flames, that is four changes of the fire which makes 208 years, since the feast occurs every 52 years. This established, those which appear on the facade of the building being of the same species, because one corresponds to each serpent—the meaning which we gave before is confirmed—416 years for each side of the monument. The Cipactli with their adjacent arches come to mean the same as the dates: these confirm the interpretation of the monsters.

Let us now rest our eyes on what remains of the cornice of the first part, and on what may be inferred from the elements which make up the second. It is clear that the meaning of the work rests on the faultless interpretation of its components.

In spite of being much destroyed one may have some success in studying these latter parts, with the help of the reconstruction theory formed by Dr. Penafiel *in situ*: of the admirable and exact description given by Seler, a first-hand observer: of the ancient account of Alzate, whose data not a few writers have reproduced as their own invention: with the help, too, of another very notable and, so far, unproved description which is found in the *Universal Dictionary of History and*

Geography, and record a direct description of the monument. Now it is possible to affirm that the cornice of the second floor presents at each side an ornament eight times repeated, which facilitates its meaning, since it is known that it alludes to the same fundamental idea. It deals with a personage seated in oriental style, on whose lips appears the sign of the word of command—the sign of the *tlatlouni:* at its side is distinguished what some have identified as the gullet of a being, which may be interpreted probably, as a reproduction of the gullets of the Cipactli, and there is also observed a circle divided through the middle by a cross of two strokes. We see here an evident chronographic sign, yet the said sphere or circle resembles one of the characters which Orozco y Berra copied in his atlas. A year being an impossible interpretation it seems probable that it refers to the *Xiumolpillia* or 52 years. The personage symbolizes perhaps the goddess which stipulates another cycle in the existence of the world. Then is not the repetition of this group suggestive? And what period do eight Xiumolpillia make? The reply is singular, 416 years.

With the above mentioned perusal we found the cypher three times on each of the north, south and east faces of the pyramid. But it is possible to find it again. The high parts of the cornice of both parts of the building were adorned exactly with figures in pentagonal form and in the shape of a snail, of which we have spoken so much. They are still distinguishable, some in one place, some in another. Let us remember that it deals with a symbol whose value may be fixed at eight solar years. On account of the badly ruined condition of the building it is not possible to know exactly how many figures of this kind adorned the cornices of each facade. Penafiel attempted a reconstruction whose model in wood is found in our Museum of Archæology. Moreover, a photograph of it is published in the work "Monuments of Ancient Mexican Art." It is clear that the archæologist took into consideration the dimension of the building and the real size of the arches still existing, so that the work cannot be considered as arbitrary, although there may be an error more or less insignificant.

Counting then the figures on the model there is found a total of 57 on each facade of the edifice, which, taking its value of eight years for granted, brings the total up to 456 for each side. The relative proximity of this figure to that of 416, so prominent in the structure, permits us to suppose a slight mistake in the reconstruction hypothesis of the archæologist and that the true number of the arches corresponded to a total of 52 for each side—these then would determine the figure of 416.

On this supposition the Great Period is found four times repeated on three of the facades of Xochicalco, with dates, figures of Cipactli, and the circle cut through the middle of the arches of the cornices. The repetition cannot be casual and certainly is not, for four times 416 equals 1,664 and three times 1,664 is 4,992 years: this was the conclusion reached in the first three eras of the universe, the concept of the Indians according to categorical interpretations of the historian Ixtlixochitl (Relaciones, p. 14). Such a coincidence cannot be the effect of chance, much more so since the identical figure may be read exactly on the stone of the calendar. The above made clear, perhaps it will not seem rash to affirm that the Xochicalco monument also is the expression of the cosmogonic theory of the Toltec culture: on its north, south and east sides, it alludes to past ages, each one of which reached the completion four times 416 years; and the fourth or contemporary epoch is found on its principal facade and on the mass proper. All the serpents wear the

emblems (portrayed on the arch) of Xochiquetzalli, the reigning deity of the last era, an age considered happy and prosperous according to the Codice Vaticano.

Let us conclude by referring to the dates engraved on the sides of the staircase and on the principal facade of the building, dates corresponding to the fourth epoch, and also measuring the time required for the construction of the building.

The hierograms on the south side of the stone are no longer legible, while those of the other side, which appear more important, may be distinguished with perfect clearness. There is no one who has seen, with its elegant frame, the sign of Caña (Acatl) accompanied by its connecting sign, can fail to perceive that it is dealing with a new fire. At a short distance appears the sign with a joining made at five points, that is to say, it treats of five new fires at the division from the celebrated one in the character of Caña. We notice that the points are not within the frames but close to the connecting points, which is a common practice. From the sign *calli* there shoot out two arms admirably expressive, one binds with a cord the sign (diurnal perhaps) Hozomatli (ape) placed at the left, the other hand obviously measures, that is, adjusts, a chronological value. This is expressed by a large mark which appears within a double oblong frame—the frame and mark which we have before identified on the side of the monument as hieroglyphics significant of 208 solar years. In other words, this shows that at the parting of the boundary line made in the year of the character *caña*, there is completed a cycle of 208 years in the year of the character *calli*.

Now, the analysis reveals this to be feasible, showing also the existence of a period alluded to by Jacinto de la Serna and endorsed by Boturini, but whose interpretation seemed enigmatic in the eyes of Veytia, Fernando Ramirez and other scholars who studied it: the period of 208 years. However, the distinguished gentleman was right—the period was a real one and had a reason for being connected with the first group in *acatl*, its last year the 52nd would be the 13 *tochtli*. As a rule, the authors consider the second group as begun again by actatl: that was what Boturini judged wrongly—he said that *tecpatl* was the reigning character. The second group ends here on the 13th *acatl*. The system demands that the third begins under *calli*, concluding logically in the 13th year *tocptal*. Finally, the fourth group of the cycle begins under *tochtli* and must end on the 13th year *calli*. Now *calli* is the sign really represented on the other side of the monument for, by a continuation of *acatl* and the five connecting points which accompany it, it tells us that other such great fires have occurred. Thus the caña year passes if we include the new initial fire, or perhaps the *Xiuhmolpillia* of the first part of the cycle affected by acatl followed up by the end of the 13th year *tochtli*, the end of the 13th year *acatl*: that of the end of the 13th year *tecpatl*, and that of the end of the 13th year *calli*.

Altogether there are five groups which, the initial feast taken for granted, make 208 years, the hieroglyphics of the oblong frame. It is noted that the marks in this case do not stand for years but periods, wherefore they are seen near the uniting sign and not accompanying the diurnal character according to the current practice. As at the end of the 13th year *calli*, the fire is renewed, expressed now by the 5th point, which alludes to the feast in question and consequently to one year of the character 13, for it was not necessary to engrave the 13 numerals with the symbol *calli*. It is a splendid hieroglyphic elypsis.

To conclude, to what year of our calendar will the date correspond? That

is not easy to say. If the 208 years measured exactly are calculated from the 739th which, according to the records, was the first *Ce Acatl* (one caña) beginning from the first part of the fourth age which occurred as we know in the year 700 A.D. we shall arrive at the 947th year of the Christian era, that in which the prosperity of the Toltec monarchy reached its zenith.

Now, up to the present time we have not succeeded in finding out who constructed the city. Intelligent travellers (Tylor in his book *Anahuac*, Ch. J. Latrobe and others) verify that the edifice was built by the Toltec monarch Nauhyotzin, and the point is that this king, as the best data confirm, ruled at about the time of the date referred to. Xochicalco dates then from the tenth century of the common era, that is to say it has now been in existence for about 1,000 years.

OJIBWA MYTHS AND TALES

By COL. G. E. LAIDLAW

5th Paper

This paper of myths and tales, collected from the beginning of 1919, introduces a certain number of new animal and bird stories which are rather interesting and out of the way. It also introduces the "cungery" camp (or conjuring camp), and the pubertal or menstruation custom of fasting in individual isolated camps. I have gone rather extensively into the Ojibwa belief in witchcraft and find that there is a strong undercurrent of superstition and a prevalent belief in witches, whose powers of transformation range all the way from ants to bears, and also include the use of fire as an aid, or an agent, as the following witch stories will show.

The northern Ojibwa, or those from "up north," are supposed to have more potent "medicine" than the local Ojibwa. The belief in the power to "witch" white people is divided. Some (Rama Ojibwa) say that they can't "witch" white people or those who have more English (white) blood than Indian, while others claim that certain northern individuals have the "power" to "witch" white people (see letter of Mrs. Lottie Marsden, Jan. 24th, 1920, and, contra, letter of Mrs. Annie York, Feb. 4th, 1920, also No. 160 Reprint, 1918).

The narrators of these tales are prone to use the double negative, and of frequent repetition, both of which have been eliminated as far as possible. Kenneth G. Snake is an Ojibwa (Rama) youth who gets his stories from his father, Samuel Snake, but his first story, No. 226, was got from his mother, Elizabeth Snake.

The stories told by George White, Joe Gosh (or Cosh), Mary Ragel, Peter Nook, John Wilson, Mary Nocks, Bob Root, who are Ojibwa from "up north," were collected by Mrs. Lottie Marsden. Mrs. Exavier Commanda got some of her stories from her husband, Frank Commanda, who is a northern Ojibwa, the others from elderly people on the Rama Reserve.

The reports and reprints mentioned in this paper are those of the Provincial Museum, Toronto, except when otherwise stated.

The combination of the woman, the serpent, and the tree, which occurs in whole or in part in some of these tales, savours somewhat of the Garden of Eden, but is world wide.

List of names of the Indians from whom these myths and tales were obtained, both the English and Ojibwa names, and the English meaning of their Ojibwa names.

John York—Kitche Penascie—Big Thunder.
Peter York—Penascie—Thunder.
Jonas George—Wah-sa-ghe-zik—A Clear Day.
Mrs. Annie York—{Me-an-Jo, Oown-no-quah} Fog Woman, or Foggy Woman.
Mrs. Lottie Marsden—Chicog quah—Skunk Woman.
Her Grandfather—Joosa.

Her Grandmother—Joesa quah.

John Wesley—{ Py-ash-ē-gōb. / Muk-kō-got.

Mrs. Sampson Ingersoll—(Peadewamock, abbreviated to Peademock)—Hear the Thunder Coming, or Thundering.

Mrs. Exavier Commanda—Pe-da-hi-no-quah—Morning Light.

Kenneth G. Snake—Sog-kee-ge-waw-sa-nene—Coming Over the Hill Man.

Samuel Snake—Kee-zhig-go-we-nene—Day Man.

Elizabeth Snake—Wah sa gah bah no quay—Coming of Daylight Woman.

Jos. Yellowhead—Shaw-woon-day-sung—Passing Through (as from one door to another).

Thos. Big Canoe—Keche Chemon—Big Canoe.

Mrs. Wm. Ingersoll—Wah Poos—Rabbit.

Dave Simcoe—Windagoe—Man Eating Giant.

G. E. Laidlaw—Moka ghezik—A Good Day.

Note.—Where blanks are left the meanings were not ascertained.
Quah is pronounced more like a short *quay*.

Some further variants of the name Nanbush and authorities as per following.

Nanahboozhoo.—Page 9, Algonquin Indian Tales, Egerton R. Young, 1903.

Nannibush (John).—A mail carrier, see Dr. Mustard's letter, 11th June, 1919, Chatham, Ont.

Nanabazhoo.—A Mississauga Reserve on Rice Lake, Ont., see "Stone Age Annals of Victoria County," by Watson Kirkconnell, M.A., an article in issue of *Watchman-Warder*, Lindsay, Ont., 23rd December, 1920.

Nanabougou

Nane bo sho

Page 116, Vol. 19, No. 2, April, 1920, *The Wisconsin Archæologist*, "The Pottawatomi," by Publius V. Lawson, LL.B.

A variant of Manitou. Rama Ojibwa.

Moh ne doo—See letter of Jonas George, 12th March, 1919. For further variant see page 19, Reprint, 1918, No. 75.

No. 182.

Witch Story (No. 28).

Told by Lottie Marsden.

Some years ago there was a young Indian man who was a great hand to make canoes. One day he started to make a canoe for his own use and an old man came to him just when he was about to finish his canoe. This old man said, "Oh! Give me that canoe." "Oh!" the young man said, "I want this canoe for my own use, but I can make you one after awhile." But the old man never said anything, he just went home. But the young man was quite sure that the old man would do something. Well, this young man soon took sick and died. There was one Indian amongst them that knew what to do with this witch (i.e., the old man) and he said, "After this young man is buried we'll watch the grave every night, and the third night the witch will come after his 'medicine.'" So they watched the first night, the second night, and on the third night there were four men watching some distance from the grave and

they soon saw a bear coming, and the bear went round the grave, and when he came to the head of it he said, "Will you think more of your canoe now than your life?" The old man (who knew what to do with the witch) who was watching said to the rest, "The bear will go around the grave three times and the coffin will come right up to the top, and he will try to cut the young man's tongue out, but we won't give him the chance." When the bear went round the second time, then they shot him. This was just the bear-skin, the old witch had all his "medicines" with him. He had little frogs and even pismires. These were the kinds that he used, and if any person saw any of these they would never think that they were witch (aids). These four Indians after they shot the bear, the next morning they heard that the old man who asked the young man to give him his canoe, was dead. This is the end of this old witch.

No. 183.

Ojibwa and Mohawks (No. 15).

Told by Mrs. Lottie Marsden.

The story about the young man (Ojibwa) who went away back north where there were quite a few reserves of Indians. This young man went to one reserve and stayed there one week, then he goes to another one the next week and he went to one Indian home. These Indians were quite rich. They had everything they wanted. This young man stayed there for one week and when he was getting ready to go to the next Indian reserve, the old man spoke to him, "You will not leave this place," he said, "I want you to stay here with us all the time." "No, I can't," said the young man.

Of course the Indians the young man visited were Mohawks, and the young man heard the old Mohawk whispering to his squaw (or his wife). The old man said, "We'll lock him in that little room," he said to his squaw, and this young man thought to himself, "Well, I am done now. I will never see my home again, or any of my relations. Well, it's my fault. I shouldn't have come to live with these Mohawks, I thought they didn't have anything against me yet, on account of the battle they had some years ago. Of course I wasn't upon the earth at that time." The Mohawk grabbed this young man and said, "I have a nice little room upstairs and I think you will have to go in there for awhile." "No," the young man said, "I stay *here* and get ready, for I am going to leave here to-day. I didn't come here to live with you." "Well, you won't leave this place," said the Mohawk. The young man looked outside the house and saw the old squaw put on a fire outside, and he saw two Mohawks coming a distance away, they both had little axes and big knives. Another Mohawk came, he had a big kettle with him. Well, the kettle was that big he had to drag it on the ground. "Well, I just am done," said the young man, he couldn't see no way of getting out of sight. There were more Mohawks coming every minute and they were surrounding this young man, getting ready to kill him. They had the big pot (or kettle) to cook him. The young man had something in his pocket that his father gave him before he left home. He pulled this out of his pocket and sprinkled it on the ground and as soon as the Mohawks smelled it they all fainted and fell on the ground, and the young man had a chance to run away then. He travelled all day and found a little camp. There was nobody

in it, he slept there that night and went off again the next day. About noon he met two Ojibwas and told them all what happened him. "You come with us, we take you to our home and give you something to eat," said they. The young man was nearly starved, they kept him there for some time, then he left them and came to his own home and told the story that the Mohawks were going to kill him and eat him, and he said "Only for you, my father, I would have been killed and eaten by the Mohawks." This is the end of this story.

No. 186.

The Lost Indian Girl.

Told by Lottie Marsden.

The story about the Indian girl who got lost one evening. It was in the winter time; she came to the woods and she didn't know where to go. It was getting very dark and she travelled all night till she came to a footpath where she stood for about an hour as she didn't know what to do, whether to follow this footpath or not. She decided what to do, well, she followed this path and she travelled all day till she came to an Indian camp, when she came to the door she rapped and there came an old woman who said to the girl, "Who are you?" "Well, I am lost; would you let me stay here over night?" "Yes, you can stay here with me all night, or you can stay here all the time with us. I have two young sons who are away hunting. They won't be back till spring. You and I will live here till they come back. Take off your clothes and warm yourself. I have some nice corn soup," the old squaw said. The Indian girl said "How do you grow your corn here in the woods?" "Well, I have some nice ground," replied the old squaw. The soup she had wasn't corn soup. She had all kinds of snakes and frogs dried, and if any strangers came to her camp she'd make this soup and they would die if they drank it. This girl would not drink this soup. She told the old squaw, "I have something better to eat than the soup." "Well," the old woman said, "you are the first one that beat (got the better of) me. I have had quite a few visitors here and they all liked the soup I make and if they drank the soup they surely lost their lives. I have killed quite a few people. I have told you that I have two sons, but I haven't any sons at all. My children died. There was an old witch that killed them, and this is the reason why I kill everybody that comes along." "Well, you shouldn't do that," said the Indian girl, "you should only kill the witches, and not everybody that comes along. Well, we'll go away. I will take you home but I don't want you to kill anybody after this. You won't take that stuff that you make the soup with." "All right," said the old woman, so they went the next morning. The Indian girl didn't let the old squaw take anything that she had. She made her burn her old camp too, which the old squaw didn't like to do, but she did it just the same. They travelled all day, and when the girl got to her home with the old squaw, she wasn't allowed to go in her home. They were all afraid of the old squaw, but the Indian girl wouldn't leave her outside. She said to her parents, "If you don't want this poor old woman I won't come in myself, as she was living alone in the woods when I found her, and she used me right, and now you won't let her come in the camp, we will both go away. You won't see us any more. Good-bye." The end of the story.

No. 187.

Witch Story (No. 29).

Told by Lottie Marsden.

Not very long ago there was an old witch on one of the Indian Reserves. She thought the people around didn't know anything about her, but they all knew she was a witch. One Sunday night she went to church and there was one Indian girl who was kind of surprised to see this witch in church. When they were going out from the church—this old witch had heard of this Indian girl, and the girl watched her. The old witch seemed to know what the girl thought. One evening the girl was all alone and the night was getting late and yet there were no signs of her mother coming. The girl went to bed and had a dream that this old witch and the devil were standing at the door so she prayed to God that they couldn't come any further than the doorsteps. The girl's parents came home very late that night and found the door half open, and they saw fire near the house. They wondered what was wrong. They didn't know that the witch knew what the girl thought of her that Sunday night. The time passed on after the girl had the dream and another evening she was alone again, she went to bed and she soon heard someone outside of the house, and she thought it was a dog, so she went out with a lamp. It was a fine night and there was no breeze at all. She looked where she heard the noise and she saw a big black cat sitting there. The cat didn't seem to want to run away at all, just sitting there with her big eyes shining like fire. The girl took a big stick and hit the cat, and it didn't run away at all. The girl hit the cat a second time and the cat then ran yelling. The girl went in and she didn't go to bed until her parents came in, but she didn't hear the cat any more. She told her parents what happened and her father said "It's the witch that's after you. You beat her." They soon heard that the old witch was sick, but they didn't let on it was this girl that hit her and that was the reason why the witch died in a few days. The end.

No. 189.

Keezis and Ketogaukoons.

Told by Mrs. Annie York.

Keezis one day took his sister Ketogaukoons by the hand and said, "Since our poor mother died we have had no happy days for our new mother (step-mother) beats us all day long, and when we go near her she pushes us away, we have nothing but hard crusts to eat, and the little dog that lies by the fire is better off than we are for he sometimes knows how we are used. Come, we will go and travel over the wide world."

They went the whole day walking over the fields till in the evening they came to a great woods, and they were so tired and hungry that they sat down in a hollow tree and went to sleep. In the morning when they woke the sun had risen high above the trees and shone warm upon the hollow tree. Then Keezis said, "Sister, I am very thirsty, if I could find a brook I would go and drink and fetch you some water too. Listen! I think I hear the sound of one."

Then Keezis rose up and took his sister by the hand and went in search of the brook, but their cruel step-mother was a fairy and had followed them into the wood to work them mischief.

When they had found a brook that ran sparkling over the pebbles Keezis wanted to drink, but his sister thought she heard the brook as it babbled along, say "Whoever drinks here will be turned into a tiger." She cried, "Ah, brother! do not drink or you will be turned into a wild beast and tear me to pieces." Then Keezis yielded, although he was parched with thirst. "I will wait," said he, "for the next brook." But when they came to the next Ketogaukoons listened again and thought she heard "Whoever drinks here will become a wolf." Then she cried, "Brother! Brother! Do not drink or you will become a wolf and eat me." So he did not drink, but said, "I will wait for the next brook then I must drink say what you will." As they came to the third brook Ketogaukoons listened and heard, "Whoever drinks here will become a fawn." "Ah; brother," said she, "Do not drink, or you will be turned into a fawn and run away from me;" but Keezis had already stooped down upon his knees and the moment he put his lips to the water he was turned into a fawn, and his sister wept bitterly over the poor creature, and the tears also rolled from his eyes as he laid beside her. Then she said, "Rest in peace dear fawn, I will never, never leave you, and she took off her golden necklace and put it round his neck, and she plucked some rushes and plaited them into a soft string to fasten to it (the necklace), and then she led him farther in the woods. After they had travelled a long way they came at last to a little cottage, seeing that it was quite empty Ketogaukoons thought to herself, "We can live here." Then she gathered leaves and moss to make a soft bed for the fawn, and every morning she went out and plucked (gathered) nuts, roots, and berries for herself, and sweet shrubs and tender grass for her companion. He ate out of her hand and was pleased, and played and frisked about her in the evening. When Ketogaukoons was tired and had said her prayers she laid her head upon the fawn for her pillow and slept, and if poor brother could but have his right form again they thought they might lead a very happy life. They lived thus a long while in the woods by themselves till it chanced that the king of that country came to hold a great hunt, and when the fawn heard all around the echoing of the horns, and the baying of the dogs and the merry shouts of the huntsmen, he wished very much to go and see what was happening. "Ah! Sister! Sister!" said he, "let me go out into the woods. I can stay here no longer." He begged so long that she at last agreed to let him go. "But," said she, "be sure to come to me in the evening, I shall shut the door to keep out those wild huntsmen, and if you tap and say 'Sister let me in,' I shall know you, but if you don't speak I shall keep the door fast." Then away sprang the fawn and frisked and bounded along in the open air. The king and his huntsmen saw the beautiful creature and followed but could not overtake him, for when they thought that they were sure of their prize, he sprang over the bushes and was out of sight in a moment. As it grew dark he came running home to the hut and tapped and said "Let me in." Then his sister opened the door and in he jumped. Next morning the hunt began again and when he heard the huntsmen's horns he said, "Sister, open the door for me, I must go again." Then she let him out and said "Come back in the evening and remember what you are to say." When the king and the huntsmen saw the fawn with the golden collar again they gave him chase, but he was too quick for them. At last, however, one of the huntsmen wounded him in the foot so that he became sadly lame

and could hardly crawl home. The man who had wounded him followed close behind and hid himself and heard the little fawn say "Sister, sister let me in." upon which the door opened and soon shut again. The huntsman marked (noted it) all well, and went to the king and told him what he had seen and heard. Then the king said, "To-morrow we will have another chase."

His sister was very much frightened when she saw that her dear little fawn was wounded, but she washed the blood away and put some healing herb on it and said, "Now, go to bed dear fawn and you will soon be well again." The wound was so small that in the morning there was nothing to be seen of it, and when the horn blew, the little creature said, "I can't stay here, I must go and look on, I will take care that none of them shall catch me," but Ketogaukoons said, "I am sure they will kill you this time, I will not let you go." "I shall die of vexation," answered he, "if you keep me here, when I hear the horn I feel as if I could fly." Then Ketogaukoons had to let him go, so she opened the door with a heavy heart and he bounded out gaily into the woods. When the king saw him he said to his huntsmen, "Now chase him all day long till you catch him, but let none of you do him any harm." The sun set, however, without those being able to overtake him, and the king called away his huntsmen and said to this one who had watched, "Now, come and show me the little hut." So they went to the door and tapped and said, "Sister, sister, let me in." then the door opened and the king went in, and Ketogaukoons was very frightened to see that it was not her fawn but a king with a golden crown that was come into her hut. However, he spoke very kindly to her and took her hand and said, "Will you come with me to my castle and be my wife?" "Yes," said the maiden, "but my fawn must go with me." "Well," said the king, "he shall come and live with you all your life and will want for nothing." Just at that moment in sprang the fawn, and his sister tied the string to his neck and they left the hut together. Then the king took the girl to his palace and celebrated their marriage in great state and for a time they were very happy, but, when a little son came to them the wicked fairy heard of Ketogaukoons' good fortune and was very angry, so she set about thinking of some way to do further harm, and cunningly managed to put her ugly daughter in Ketogaukoons' place as queen and to keep the king from knowing of the change. One night, however, after the real queen had stolen into the palace nursery to look at her little boy and the fawn which lay in one corner of the room, the nurse told the king what had happened. Next night the king watched and when Ketogaukoons came in, recognized her as his lovely queen and thus broke the spells woven by the wicked fairy. When the king heard of the evil done by the fairy and her daughter he said that they should both die, and with their death the fawn changed again into Keezis who lived happily with his sister ever afterwards. The end of the story.

Note by G. E. L.—Mrs. Annie York gives her Ojibwa name as Oown-no-quah ("quah" pronounced as "quay," short) meaning Fog Woman in English, or Foggy Woman. While her late husband Peter York said her Indian name was Me-an-jo, meaning not ascertained.

No. 199.

THE INDIAN AND THE BEAR.

Told by Mrs. Exavier Commanda.

Once an Indian made a big wigwam in the forest. He did not make a stairway in it, just put nails on the wall. One day the door was open and a big bear ran into the wigwam. The Indian climbed upstairs ahead of his wife, but the woman got the axe and hit the bear as she was climbing up, and killed it. After awhile the man looked down and saw the bear dead on the floor, he was very glad. He said to his wife "We killed it all right," and came down. He did not thank his wife for killing the bear, but he said, "They both killed the bear."

No. 200.

WITCH STORY (No. 31).

Told by Mrs. Exavier Commanda, Ojibwa Woman, Indian Name "Pe-da-bi-no-quah," meaning "Morning Light." From Rama Reserve.

One time an old witch-woman thought she would bewitch her husband, so she started and made herself like an owl. The Indian was surprised at the owl visiting him pretty nearly every night. It would sit close and look at him, and one night as he was coming home there sat the owl on a big stump by the river. He took his gun and shot it. Down it went and all he heard it say was "You are cruel to me." And it fell in the water. The next day the Indian heard that his wife had been drowned. They had separated from each other a few years before and the old witch thought "she'd fix him" but she got it herself, and that is the end of her, and the Indian is still living yet.

No. 201.

SCHOOL CHILDREN.

Told by Mrs. Exavier Commanda.

One day a school teacher got her little Indian girls together and asked them who were the most famous men in the history of the world. One of the little girls help up her hand and said, "I think our Indian Agent is one of the men, also our Chief, because they are the only ones that come to see us." She thought she was ahead for she did not know what the teacher meant, but the teacher just smiled.

No. 204.

A DWARF STORY (No. 6).

Told by Mrs. Exavier Commanda.

One day an Indian from here (Rama) went over to Washago, which is not very far from here. When he got to a certain place he saw a little wild man's house. He had not seen this when he was there before. He went over and

looked in. He saw a little bed and everything such as a table, stove, cupboard and chairs in it, also a purse hanging there with money in it. He took the purse and saw what was in it, but put it back again. But he thought that when he was coming back in the evening he'd look in again and went on. These little people are only about a foot high or a little more, so you can imagine how small the house would be. When the Indian came back in the evening on his way home he looked for that little house, but he could not find it. But it was there that morning, it had disappeared. That little man did not let that Indian see his little house again.

No. 205.

Witch Story (No. 32).

Told by Mrs. Exavier Commanda.

One evening a little Indian boy was made to go to bed early by his grandmother. He was kind of surprised, so he said to himself, "I'll not go to sleep, I'll make a hole in the blanket and peep through and watch to see what will happen." In a neighbour's house a little boy was sick, and the old woman (grandmother) was doing this (bewitching the neighbour's boy), that was the reason why she sent her grandson to bed, so as to get busy at her medicine. When she thought he was asleep she started and dressed herself like a goose and went off. She just said, "This will be the last night I'll visit him." She *fell down*, as the saying is. It's not herself that goes, it's the soul of the person that's doing it (doing the bewitching), what harm she wants to do to the person she hates.

After awhile the goose came back and she (the witch) woke up and undressed herself (took off her gooseskin) and put her medicine away. She had finished her work and the boy (neighbour's) had died. The little boy (her grandson) did not let on he had seen what was done.

The next day the old woman told her grandson that she was going to a bee (planting corn) and that she wanted him to stay around the house and not go any place while she was gone. So after she was gone he thought of the "medicine" he saw the witch have the night before, so he went to work and dressed himself like a goose and said, "Let's go to the bee." Off he went. While the squaws were planting they saw a goose coming and they took sticks and chased it around and said, "A goose, a goose (pi shki oi). Just then the goose spoke and said, "That's what my grandmother does." As a rule the witch goes around at nights but the boy did it in the daytime, and the people knew what she was doing because of the boy following her example.

Note.—Compare with No. 13, Report, 1915.

In reply to a query as regards the power of witches, Mrs. Exavier Commanda in letter of March 21st, 1919, says: "The witches have power to make themselves look in any way (like anything) they like. They only have to put on a little of the feathers or fur on their hands and feet (of the bird or animal they want to represent). The witches themselves do not go, but their souls go to the place where they (the witches) intend to go. The Ojibwa for witch is 'mi da.'"

No. 206.

Ojibwa and Mohawk (No. 16)

Told by Mrs. Exavier Commanda.

Six Indian women (Ojibwa) started fighting the Mohawks. At the mouth of the Sturgeon River there is an island. An old Ojibwa Indian took his daughters there. There were seven canoes of Mohawks coming to fight them. Those Ojibwa girls killed all these Mohawks there. The Mohawk Chief cried to see the women killing them. The women used weapons like these (war clubs) in slaying their enemies.

The Mohawks had tackled the Ojibwa here before. The men were away some place when these Mohawks came again, which was this (the above) time. Two little boys were out berry picking, when the Mohawks came again. The women told the men they had fought the Mohawks that day. These little boys told them that they were going to be attacked that night again, so the Chief told the boys that they could not know what was to happen before the old people (knew) and would not believe them. That night the two little boys hid themselves under a canoe when they knew the Mohawks were coming, and the six women hid away in the woods that night, but the men stayed in the camp and watched. The Mohawks came in twenty canoes, and every canoe was filled up, but there were only eight Ojibwas in the camp. The Ojibwas killed all the Mohawks but one and told him to come over and fight the women they (the Mohawks) fought that day." So the Mohawk came to the portage where North Bay is now, to go by Trout Lake, to look for his other Mohawk friends. Four days afterwards the Ojibwas gathered together to fight the Mohawks because of the Mohawks fighting the women. The two little boys said they'd fight too. One of them was ten and the other thirteen years old. No one knew that the little boys were as intelligent as they were. So the Ojibwas started out and the boys went too. The old man made weapons for his grandchildren, that is the same old man that took the women to fight the Mohawks. When they (the war party) started, the little boys were told to go back but they would not, they went on after their people (the war party). The Ojibwas (camped and) slept there and had to find out who would dream where they were to meet their enemies. One of the little boys dreamed of an eagle with his breast all blood, sitting on a rock on a certain point, but the older Indians did not dream of anything. The other little boy dreamed that they were to see the Mohawks on Lake Talon, having their dinner in a bay. The six Ojibwa chiefs had twenty men with each of them, and the little boys were to be the captains because they (the war party) were proud of the boys dreaming where they were going to meet their enemies. One of the boys said that they were to see the Mohawks eating blueberries after dinner, and it was true what the boy said. The head chief said, "Who will go there so as the Mohawks would not know." The place was clear and it was hard to go near. There were about sixty Mohawks there so the boys said they would go. When the boys went the Ojibwa could not see them, but just saw smoke. The boys dressed like fish, and took the guns of the Mohawks and wet them so as they would not go off. Some of the Ojibwa hid on an island and some on a point. After the boys were through with the guns (wetting them) they went away from the shore and made the Mohawks see them and shoot one of them. When the Mohawks tried to shoot them, their guns would not go off. These boys went through the place where the Ojibwas were hiding (enticing the Mohawks

into an ambush). They were nearly caught by the Mohawks. When the head Mohawk was catching (trying to catch) the boys he made a noise like the raven and like the crow. The Ojibwas shot the Mohawks, and the boys turned back and slew all the Mohawks that were on the lake. All the Mohawks (there) were killed at that spot, and the Ojibwa came on to the Montreal River

One night one of the little boys dreamed again that they were going to meet the Mohawks. He dreamed that a Mohawk was to be in a tree watching for the Ojibwas to come, and when he saw them he was to whistle to his comrades if he saw them coming, so the Mohawks would get ready for battle. That was what the boy dreamed that night and he dreamed of the place where they were going to see their enemies again. That morning before noon the boy saw the place he dreamed of, where they were going to see their enemies again, and he told them (the war party) not to show themselves, but the little boys just went on, as that was where they were going to fight again, and looked for the Mohawks. They saw the Mohawk in a big tree watching, but the Mohawk did not see the boys, so the boys made up their mind to go over and see how many Mohawks there were, they told the Ojibwas to watch them, and after they had killed the Mohawk that was in the tree, to come along, and that they would kill him without making a noise. So the boys went to the tree; but the Mohawk did not see them coming although he was watching. The boys tapped on the tree where he was and the Mohawk was so surprised that he fell down out of the tree, and the boys hit him and slew him. He did not have time to whistle to his friends. The boys then went over to the portage to see where the Mohawks were. The Mohawks were cooking their meal and did not know the boys were over seeing them do so. The boys went around seeing the place where they were going to fight, and then went back and got their friends to come over. When they got there the head chief knew what they were to do so as to kill all the Mohawks. There were rapids there and some of the Ojibwas went across the river and killed all the Mohawks. The little boys went over themselves (first) and shot at the Mohawks who ran out (after them), and the Ojibwas had a chance to kill them all, shooting them with bows and arrows and with guns. All the Mohawks were slain as many as there were at that time. One of the head chiefs of the Mohawks was skinned by the Ojibwas and his skin was cut up into strips and laid (stretched) across from the portage to the other side of the river.

Notes.

In reply to queries, Mrs. Exavier Commanda explains as follows:

"The weapons the old man made for his grandchildren were war clubs. The Ojibwa name for war club is pi-quok-do-pi-quh-mah-gun."

The Mohawk chief was skinned alive by the Ojibwas. "Nodway o gi mah" is Ojibwa for Mohawk chief.

Why the Mohawk (in the tree) did not see the boys coming? They had the power to be unseen by their enemy.

The boys had power to make themselves like fish. (They dressed like fish, the idea being implied that as they had to go through water, this might be an aid, so they took the fish form.)

The Mohawks just made noises like crows and ravens. They believed they were to kill the Indian boys there, so that was why they made those noises, but these boys went straight to where the Ojibwas were and the Mohawks were all killed there."

Notes by G. E. L.

War clubs, see note, p. 16, memoir 31, Geological Survey, Ottawa. "Myths and Folklore of the Temiscaming Algonquin and Timagami Ojibwa," by F. G. Speck. "Pagwák, wut pugemágan—arrowhead hammer, an old style of war club with a stone set in a big wooden head attached to a handle and swung by a thong from the warrior's elbow to leave his hand free."

Mrs. Commanda sketched a war club of this type. The writer has one with a handle about 20 inches long and an oval head 3 by 4 inches in which is set like a beak an iron arrowhead 1¾ inches long. Bone or horn beaks could also be used. The writer has found several such on Indian village sites in this locality.

"Nodway" is Ojibwa for Mohawk, see No. 173, Ojibwa Myths and Tales, by G. E. L., and notes thereon.

No. 207.

Thunderbird Story (No. 7).

Told by Marjorie St. Germain.

A long time ago there lived Indians in their own settlement. They believed in Thunderbirds, except one man did not quite believe in them, according to what their white man preacher said, to quit worshipping idols. The white man just imagined they were idols (as lots of people nowadays say there are no such things as thunderbirds). The Indians said to the preacher that they weren't worshipping idols, that if they (the thunderbirds) were idols, they couldn't have power to kill serpents, and every time it thunders the serpents go underground. The thunderbirds think that they are after fish, like as if any of us (the Indians) like to go fishing. Of course the preacher would not believe it. One day this Indian as above mentioned thought he'd go hunting. After going all through (among) and over the high rocks, he saw a pretty scene at a distance, it was a circle of a nice greenish colour. He went closer to investigate. The pretty scene seemed to vanish away before his eyes. It began to spread out longer. To his surprise it was a serpent and a big white bird, about like an eagle. The serpent spoke to the man saying, "Shoot the enemy, it's going to kill me." The bird said "No, don't shoot me with your bow and arrow, shoot the serpent." The man got so bewildered that he did not know which to shoot at. The serpent said, "If you shoot the enemy I will give you power to kill anything you wish of wild game." The bird again spoke "I perhaps have a better power than the serpent, anything you wish will happen and will aid you all along." So the Indian shot the serpent. The scene vanished away gradually and then a big thunderstorm and lightning came on. The man noticed a big white feather about so long. He picked it up and wished for the storm to cease, and it did. He went home glad to tell of his fortune. So again the white preacher came along to preach a sermon for the Indians. This man went and had a chat with the preacher about his *feather* fortune. The preacher told the man "to wish a big storm, just to see if it will come on," and it did, the most awful storm that anyone had seen, and it ceased in a little while. Everything went well in the village. The minister never thought of idols any more. That is the end of a story.

Note by G. E. L.—Compare with No. 198.

No. 208.

NANBUSH AND HIS BROTHER (NANBUSH STORY No. 18).

Told by Marjorie St. Germain.

Nanbush had a brother and they were both camping together. His brother was very lazy. Nanbush did all the cooking, fire making and hunting. All that his brother did was to sleep and eat. Nanbush gets lots of wild game when he goes hunting, each night dressing it and hanging it to dry ready to store up for winter's use. Some wild animals had been gathered around together to plan what they would do to Nanbush, fearing he may kill them all. So the plan was for a bear to go to Nanbush's camping place early one morning, so that Nanbush may follow his tracks. Early one morning Nanbush saw the bear track and followed it. After following the track a distance away from the shore (on the ice) about the middle of the lake, seeing no more tracks and looking around, he went into an ice hole into which the bear had gone. Nanbush's brother waited and waited till the food was all gone. He called out for Nanbush till he almost starved to death. He made up his mind to look for Nanbush. He went to every destination where the wild animals were. But there was no Nanbush there, till at last he laid down on a side of a rock starved to death, and there grew such lovely moss. The Indians say that is how we often see moss growing on the side of the rocks. That is the end of a story.

No. 209.

OJIBWA AND MOHAWK (No. 17).

Told by Marjorie St. Germain.

Once a long time ago lived two sisters and their only brother. This boy made a living for his sisters. Each day he would go hunting and always had good luck. One night he did not return. His eldest sister felt bad, she loved her brother the best. It went on many days, the boy did not return. The eldest sister thought that she must know what happened to her brother so she went *on fasting*. Her sister would bring her food, but she would not take it. On the tenth day (of the fast) she saw a vision of a pretty woman dressed in black, saying, "Why do you fast. You must have some nourishment or else you will die." She told this woman why she was fasting. The woman told her that "the Mohawks had killed her brother and if you want to punish the Mohawks, I will see that you get through all right. Get your sister and men with swords with you, and every Mohawk settlement you come to yell out and the Mohawks will all faint," and she disappeared. So this girl got ready and started out. The Mohawks saw the Ojibwas coming, the old women ran out to the lake for water, some were making fire, and some had their bows and arrows ready to shoot at the Ojibwas when they came nearer. But as soon as the girl came closer she yelled out and the Mohawks all fainted. Then the Ojibwas went to cut the Mohawks' necks off. This went on for some time till they came to the very last Mohawk settlement. They only left a man and a woman. One of the big chiefs of the Mohawks, the strongest of the tribe did not faint when the girl yelled, so they took him along with them and treated him roughly till they came to a big lake. One of the Ojibwa men cut his neck off and still the head and body would

wiggle around, so they cut him to pieces. They made a roaring fire and put all the pieces in a big pot to boil, and then they buried them. That is the end of a story.

Note by G. E. L.—This fasting is a pubertal or menstruation custom, see note to No. 185, this series. Compare with No. 103, Reprint, 1918, Ojibwa Myths and Tales.

No. 210.

Tinzhaw and the Giant. (Petit Jean Story No. 8)

Told by Marjorie St. Germain.

Tinzhaw was once captured by a huge giant. He wasn't fat enough for the giant to kill (to eat) so he made Tinzhaw work for him, and he also wanted to fatten Tinzhaw up and have him ready for a big feast. Tinzhaw worked a plan out, which was to make a bag and fill it with rubbish and hang it around his neck to make the giant believe that he had plenty to eat. At each meal he ate very little, just barely enough to have a little strength. He made himself a nice comfortable eating place, that the giant might not see him throwing away the food. So one day the giant planned to kill him. He asked Tinzhaw if he was feeling himself gaining. Tinzhaw said "No, the food does not agree with me. Can't you wait a while longer?" The giant got so roaring mad (angry) and made an attempt to kill him on the spot. Tinzhaw begged for another day or two. The days passed by. The giant took out a knife. Tinzhaw held out his arm, which was nearly nothing but skin and bone. The giant cut off a piece of flesh and finding there was nothing but skin and bones to him asked if he ever had enough to eat. Tinzhaw claimed that he was always filled up to the neck. The giant felt him and believed it. The giant planned to go to another settlement of Indians. They camped again towards evening after a long journey the following day. Tinzhaw made a big fire and rushed out to the lake for water, while the giant was resting for a while, and who made up his mind to go and kill a couple or so of Indians. Tinzhaw was out of sight of the old giant, so he rushed over to the Indian settlement, telling them of the giant. The men got ready with their bows and arrows and went around to where the giant was camped, and shot at him from every direction and killed him. Tinzhaw lived happily afterwards. That is the end of a story.

Note by G. E. L.—The giant was a windigo.

No. 212.

Ne Gon Nan Quad.

Told by Jonas George (Wah sa ghe zik).

A man was living in Kingston over one hundred and fifty years ago. He was a big and powerful man. He knew everything on earth. He started to travel to see the Indians away north and tell them that he knows most everything just like a preacher.

There were no preachers at that time in Canada. This wonderful man told the Indians to think more most of the time. Moh ne doo—that is God—made earth and heaven.

This man went back to the Rocky Mountains and all over to the North Pole to tell the Indians that Moh ne doo sent the game on earth, and to use good judgment in killing what they wanted, and not to waste anything that they killed. He said to the Indians "Keep my sayings, you will live well all the time in this world." He went to Hudson Bay, to look for the Indians all the time, and to do wonderful things. What he said in teaching is very true.

There were no schools at that time. This man was looked upon as good and great by the people.

One time he went on top of the mountains and looked around. He heard the nice (good) saying "Look up all the time, you will be a good man in this world." So he remembered.

He spoke to the people so plain. He said to them to do the same (not to lie).

Sometimes the snow is deep up there, eight or ten feet deep. He walked on top of the snow without snowshoes and went any place where he liked to go. So he is around there yet. I guess he is there now. His name is Ne gon nan quad.

No. 213.

Witch Story (No. 33).

Told by Mrs. Lottie Marsden.

The story about the Indian boy who was witched by an old Indian squaw. This young man met this old witch and the witch asked the young man to go with her a piece and to carry some of her parcels, but the young man refused her. The old witch said to the young man "All right for you, you will have very much trouble. You will try all doctors to cure you, but they won't do you any good." Two weeks after the young man had a dream that the old squaw whom he refused to help to carry her parcels was coming to where he was sleeping, and he dreamt that the old witch came right straight to him and grabbed his mouth, and he dreamt that the witch caught hold of his upper lip, then he fainted. The next morning when he woke up he felt his mouth kind of queer feeling. He looked in the glass before he left his room, and when he went to the table to eat, his mother said to him, "Look here my son, what is wrong with your mouth?" "Well, I had a dream last night. The old squaw that I refused to carry her parcels, came to me and grabbed me by the upper lip, and I guess that's the reason my mouth is now crooked." "Well, I don't believe the witch can do that," said the mother, and the father. The young man was very good looking and I guess the old witch thought he might be her son-in-law. Well, the young man went to the doctors and they cut him, they thought his mouth might come to the right shape again, but they didn't do him any good. The parents heard of an old man who could cure almost anyone who was harmed by witches, so they took their son where the old man lived. This old man said, "I will cure you my friend," and so he did. He put roots on the young man's lips, like a poultice. The young man's mouth was crooked on the right side, and the old man put the poultice on the left side. He put this on for a few nights and the young man's mouth came to the right shape again. And the old man charged him ten dollars. They thanked the old man and went home to their own reserve. The poor young man said something (derogatory) about the old man that cured him, and the old man heard this and he sent word to the young man, that some morning his mouth would be crooked like before. One morning the young man

felt his mouth in the same shape again and he asked the old man to cure him again, but he wouldn't and the poor young man went on like this. If he had never said anything about the old man that cured him, he would have been all-right as long as he lived. This is the end.

No. 214.

Windigo Story (No. 12).

Told by Lottie Marsden.

It was in the wintertime and the windigo was alone away back in the bush. He began to feel hungry and he thought to himself, "I will go west and look for a reserve of Indians and see if I can find one." The big windigo travelled for a long time but he couldn't find signs of Indians anywhere, so he got up on the biggest tree that he could find and he saw a little smoke a long ways off. When he got down he didn't know where the smoke was, so he got up again and he saw another smoke nearer this time which he didn't lose track of. He started and he found an old camp. "Now," he says, "somebody must live near. I will have something to eat." He saw lots of Indian snowshoe tracks and he found the reserve. He went to one camp first and then to the next one and kept on like that till he found the fattest one (person) of the lot, then he stayed there for a long time. He went around again looking for the fattest ones and he would eat them. The Indians soon knew what to do. "We won't eat hardly anything, so we will be all thin and he (the windigo) will feel lazy and sleepy." The Indians in that reserve didn't eat hardly anything for some time, just enough to make (enable) them to get around. There was one Indian from that reserve away and he happened to get back home at that time. The Indians were very sorry to see him coming. The windigo soon smelled him and said "Somebody is near here." "Nobody is here," said the rest of the Indians. "There is," he said. "I can smell him and I am going to find him for I am getting very hungry now." "Well," one Indian says, "we'll do something to him, we'll tell him the man is in that camp and when he goes in there to get him we'll hit him on the back of the head, and he'll faint and we'll get the chance to kill him." So they told this windigo that the man was in a certain camp. The windigo went there and went in, and they then hit him with their tomahawks on the back of the head and he fainted, and they all got at him and killed him there, and they dragged him to the bush and buried him and this was the end of him. He was supposed to be the biggest windigo. Giant is his name in English. The end of the story.

No. 215.

Ojibwa and Mohawk (No. 18).

Told by Lottie Marsden.

Some time ago the Mohawks were camping alongside the river. They made birch-bark canoes. One day they all went out to pick blueberries. The Ojibwas went to this camp and stole everything they had. The Mohawks had lots of everything, lots to eat, and lots of meat of all kinds, such as deer meat, porcupine, and rabbits. They also were drying some raspberries on boards. When the berries are nice and dry they are put into bags and put away for winter use. The

Ojibwas put something on the berries and the meat that they didn't take away with them, and did all kinds of tricks on the Mohawks. The Mohawks got home that evening, and as soon as they knew the Ojibwas had been there they said, "To-morrow we'll look for them, we'll catch them. Get ready all you big men," said one big Mohawk. "To-morrow we'll catch those Ojibwas and pay them back for all what they have done to us." The Ojibwas got home that night, they knew the Mohawks would follow them, so they got ready and watched all night. They got their tomahawks ready and hid behind the bushes near where they were camped. The Mohawks didn't go that night, they waited till the next night and started off to tackle the Ojibwas, but these were too smart and the Mohawks didn't get a chance at them. Well, when the Mohawks got near where the Ojibwas were the latter killed four of the Mohawks and the rest got away and went back to where they were camped. "We'll go back again some night, we won't let them go." Well, they got ready again one evening to go and tackle the Ojibwas, and when they got there the Ojibwas were still watching for the Mohawks, and they killed them all, and dug a big grave and put them all in. They went to where the Mohawks' wives were and took back to them everything that they took from the Mohawks. The Mohawks' wives were all right. They were not sorry their men were killed. "For they have killed quite a few of the Ojibwas," said one of the Mohawk wives, who lived there by themselves. This is the end of the story.

No. 223.

Ojibwa and Mohawk (No. 19).

Told by Mrs. Exavier Commanda.

Once an Ojibwa married a Mohawk's daughter. It was before the time when the Mohawks had war between them and the Ojibwas. This Mohawk wanted to do some harm to this boy. He went to work and killed his son-in-law and prepared for a big feast. He invited the father and mother of this young man. When they had come he told them "to sit at the table and eat what he'd give them." The Mohawk came and placed the head of the young man before the father. The Indian (Ojibwa) ate of the head and never let on that he knew what it was. So time went by, then the Ojibwa made a feast too, and invited this Mohawk, when the Mohawk had sat (down) at the table the Ojibwa came and placed his (the Mohawk's) daughter's head before him. When the Mohawk saw his daughter's head he cried out with a loud voice and could not eat. Then he began to think what he had done to his good friend. He died shortly afterwards. Compare with No. 9, Report, 1915.

No. 224.

The Two Drunken Squaws.

Told by Mrs. Exavier Commanda.

The Indians from here (Rama) used to go all over in the summertime digging ginseng root. So one fall, as they were coming home, they were having a high old time. Nearly everyone was drunk, even the women. So two women began to have a row with each other. They had an awful fight, one of them had her hair all down. They tore each other's clothes. The woman whose hair was all

down ran over and picked up a hat. She did not know it was her own, and she tore it all to pieces. So while she was tearing the hat, her grandchild came over and asked her why she was tearing up her hat, and that she was making herself all the poorer. She thought it was the other woman's hat.

No. 225.

A "Cungery (Conjuring) Camp."

Told by Mrs. Exavier Commanda.

A "cungery camp" is a place where Indians used to go to find out secrets. No matter how far away a person would be, they would find out who was doing something (anything) wrong to them.

This "cungery" camp, they say is something stronger than witchcraft, and it sometimes does good to the person that wants to find out something. If there is anything an Indian wanted to find out, he'd only have to make this camp, and the birds would come, even the wild animals, and tell the secret. If they saw or heard anything about it. If anybody was killed or bewitched, they'd find out here.

No. 226.

Nanbush and Nokomis (No. 21).

Told by Kenneth G. Snake.

I am telling you a short story of Nanbush. He was with his Nokomis (grandmother) hunting beaver. He told her to watch (for) the beaver coming. He told her that he was going (to) where the world ends and chase the beavers to where his Nokomis was, and he said to her to whistle when she saw a beaver coming and he would come back and kill it. When his nokomis whistled he came running to kill the beaver, but was too late to hit the great big beaver, he missed it. He said to his nokomis "It would be right to pound (beat) you," so he killed his nokomis.

No. 227.

Nanbush and His Brother (No. 22).

Told by Kenneth G. Snake.

Long time ago Nanbush and his brothers lived in the woods. Each morning his brother would go out to hunt animals and birds and bring them home for Nanbush his old brother. Nanbush was (so) old, he could hardly walk. One morning as the young boy went out he saw the track of a deer, so he followed the track the deer (tracks) went on the ice, and went a little (way) from the shore and went into a hole (ice-hole), but just as the boy was putting his feet in, he was caught up into the skies and there he stayed for a long time, and poor Nanbush turned into rotten wood. After that the boy sent some people to hunt for Nanbush and when the people came to where they saw old Nanbush last they found his clothes on the wood, and when they sang old Nanbush was once more raised from the dead, and he was invited to a big feast with his young brother, and they lived together happy. (This was) long before Nanbush died.

Note by G. E. L.—The "rotten wood" here is evidently meant for a rotten or old stump, which occurs in other Ojibwa stories.

No. 230.

Ojibwa and Mohawk (No. 21).

Told by Lottie Marsden.

The story that I was told by my grandmother. My grandmother is very old and I used to ask her to tell me some stories that her grandfather used to tell her, and one day she told me a story that there was a young girl got lost. She was an Ojibwa girl and she came to a village of Mohawks and the Mohawks were very glad she came to their village. It wasn't because they were glad to have her, they were intending to eat her. The Ojibwa girl was quite happy. She thought she would get along all right with the Mohawks. You know the Mohawks can't understand the Ojibwas (language). One young Mohawk thought a lot of this girl. He told her that they were going to kill her. He used his fingers (sign language) to tell her that, and this kind-hearted young Mohawk took the Ojibwa girl and they went away back in the woods and hid. The young Mohawk took lots of stuff to eat till they'd found the girl's home, where they lived for some time with the girl's parents till they went off again. The Mohawks weren't satisfied, they were sorry they didn't kill the girl before the young Mohawk told her that she was going to be killed. These Mohawks travelled all the time looking for the young man and the girl but they never found them. The young Mohawk and the girl got married and he said to his wife, "I think I will go and look for my parents and started off alone but told his wife the time he'd be back. Well, he travelled through the woods and he heard some one coming a long ways off, so he hid and he heard his father coming and they were talking about him. They said, "Though he's our son I wouldn't forgive him. If we ever find him we kill him, for he thought more of the Ojibwa girl than us, and told her that we were going to kill her. He must think a lot more of the Ojibwas than us Mohawks." The young Mohawk never moved. He waited till they were a long ways off, then he went back to his wife and told her what he heard his parent say, and he said to his wife "To-morrow I hunt and if I don't come home in the evening you will think I am killed by my father." He started off the next morning and he did meet his father and killed him. The end of the story.

No. 235.

The Muskrat and the Beaver (No. 2).
(Changing Tails.)

Told by Mrs. Exavier Commanda.

In the olden times the muskrat used to have the beautiful big tail the beaver has, and the beaver used to do his best to get it, because the muskrat made big splashes as it was playing in the water. So one day the beaver asked the muskrat to lend him his tail and he would lend the muskrat his, so the muskrat said "All right," so he took off his tail and put it on the beaver, and the beaver put his tail on the muskrat, but he put it on crooked. When he put on the muskrat's

tail he jumped into the water and showed the muskrat what a nice tail he had. When the muskrat asked the beaver to give him back his tail the beaver would not, so he started to cry. So that is why the tail of the muskrat is crooked and why he has little eyes. He cried too much for his nice big tail, and for the beaver not giving it back to him.

Note by G. E. L.—See No. 5, Report, 1915, of which this another version. Also No. 218 this series.

No. 236.

THE RABBIT AND THE LYNX.

Told by Mrs. Exavier Commanda.

One day a rabbit was running along the rocks. He met a lynx. They used to be good friends to each other. The rabbit asked the lynx "Where he was going." The lynx answered, "Over! I am going over to the 'Slit Mouth Rocks.'" He was just making fun of the rabbit as rabbits have "slit mouths." Then the rabbit knew why he said that. So the lynx asked the rabbit where *he* was going, but the rabbit said "I am going over to where the 'Bad-face Rock is,'" and ran on. The lynx ran on, after awhile he stopped and began to think the rabbit was making fun of him, so he turned back to kill him, and to this day if a lynx sees a rabbit he'll tear it to pieces and eat it.

Note by G. E. L.—Incident of wild cat chasing rabbit, see p. 380, K. Col. Coll. Pub., No. 34, European Tales Among American Indians.

No. 237.

THE INDIANS AND THE PORCUPINES.

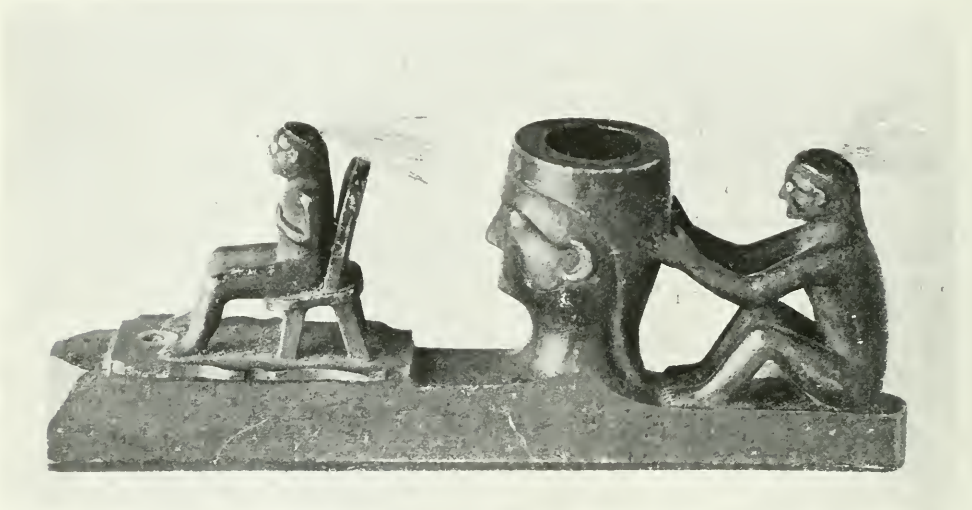
Told by Mrs. Exavier Commanda.

Once there was a family of Indians camping in the woods near a lake. These Indians had no way of earning money when they were so far away from town so they lived on porcupines. They got so tired of eating the same meat every day, porcupine for breakfast, for dinner and supper, so one day one of them said "They'd go fishing." They left the next morning, as they were walking along the road they saw a porcupine climbing up a tree, one of them said "shall we kill it?" but one of them began to vomit; he had got so tired of porcupine, that he didn't feel like having any more. It made him sick, just with seeing it.

NEW ACCESSIONS TO MUSEUM

No. 38457. This artistically finished Chippeway pipe was unearthed in a store on Adelaide Street, Toronto, by that enthusiastic collector, Frank Eames. Upon looking up the history of the pipe which for more than half a century had disappeared from view he found a reproduction of it in the Canadian Journal (1857). He presented it to the Ontario Provincial Museum. Sir Daniel Wilson gives a very fine description of this pipe and states in his article on Pipes and Smoking:

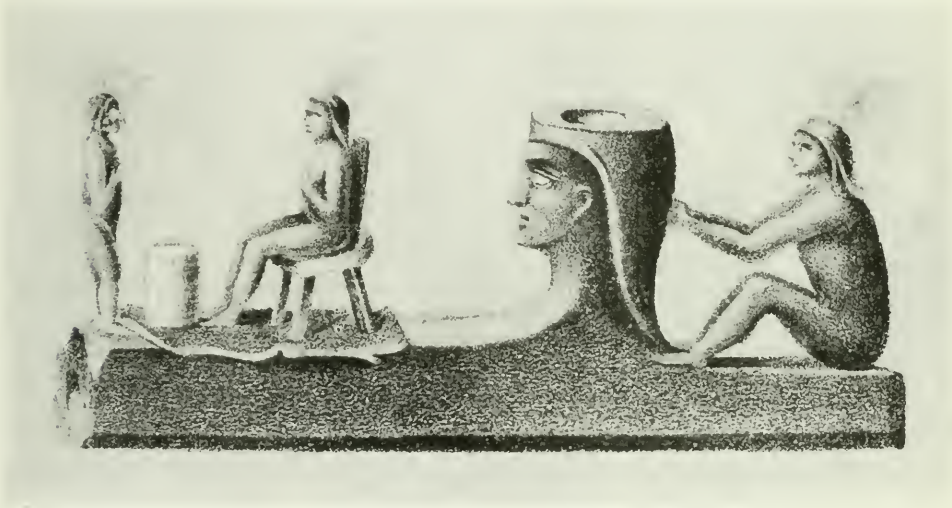
"That in the curious collection of pipes now in possession of G. W. Allan,



No. 38457—Chippeway pipe.

Esq., and including those obtained by Mr. Kane among the Indians of the northwest, are two Chippeway pipes carved by the Indians bordering on Lake Superior, out of a dark, close-grained stone, easily wrought and admitting of considerable minuteness of detail. This one measuring six and a half inches long, consists of a quadrangular tube, from which rises the bowl in the shape of a human head, of very sphynx-like aspect: and with white beads inserted for the eyes: behind this an Indian seated on the ground holds his hands to each side of the head (colossal in proportion to him), in front is another Indian seated on a chair, and before him stands a third figure neatly carved out of the red pipe stone, found chiefly on St. Joseph's Island. All the figures are well proportioned and carved with considerable minuteness of detail. Some of the details in this example—the chair and the barrel—are obviously borrowed from European models, but the general design is purely Indian; the figures are further completed with native head dresses of feathers (the down from the breast of an eagle), and the whole conception and execution well illustrates the usual style of the more elaborate Chippeway pipe sculptures.

"One of the most celebrated of these Indian pipe sculptors is *Pabahmesad*, or the Flier, an old Chippeway still living (1857) on the Great Manitouanin Island in Lake Huron: but more generally known as Pwahguneka: the Pipe Maker, literally 'he makes pipes.' Though brought in contact with the Christian Indians of the *Mahnetooahning*, or Manitoulin Islands, Dr. O'Meare informs me that he resolutely adheres to the pagan creed and rites of his fathers, and resists all the encroachments of civilization. His materials are the *muhkuhdupwahgunahbeck*, or black pipe-stone of Lake Huron, the *wahbepwahgunahbeck*, or white pipe-stone, procured on St. Joseph's Island, and the *miskopwahgunahbeck*, or red pipe-stone of the Couteau de Prairies. His saw, with which the stone is first roughly blocked out, is made by himself out of a bit of iron hoop, and his other tools are correspondingly rude; nevertheless, the workmanship of *Pabahmesad* shows him to be a master of his art. One of the specimens of his skill has been



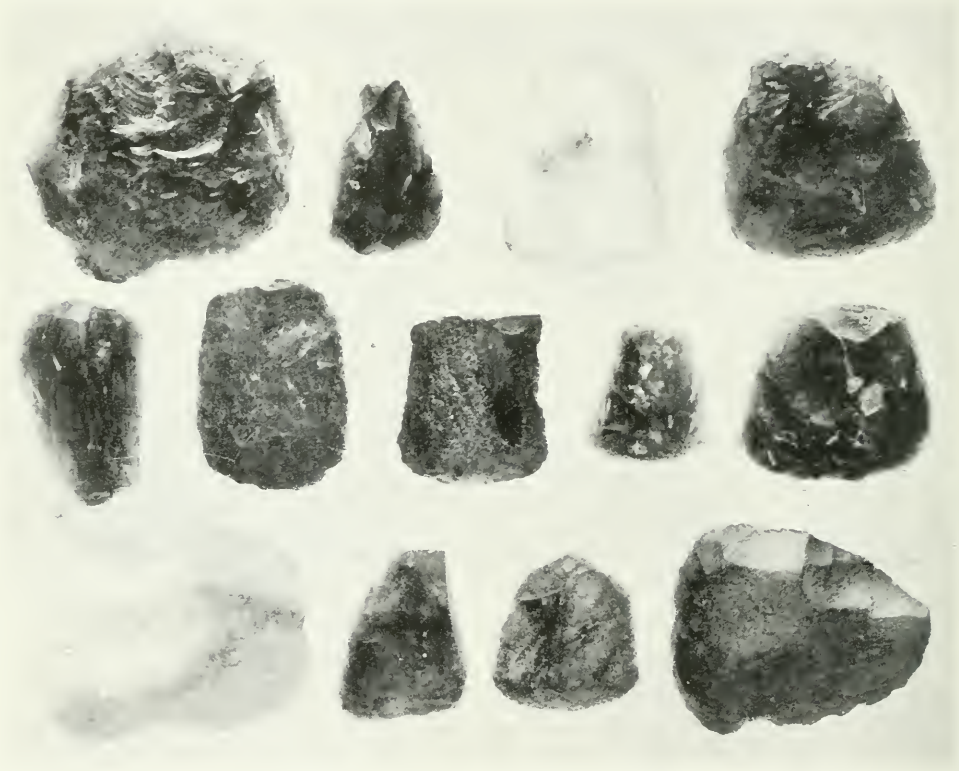
Same pipe as No. 38457, as illustrated *Canadian Journal* (1857).

deposited by Dr. O'Meara in the museum of Trinity College, Dublin, which, from the description I have received, appears to correspond very closely to the example figured on this page."

Dr. T. G. H. Drake, of Caron, Sask., sent to the Museum a fine collection of arrowheads and what he calls turtle backs. They are illustrated on pages 38-9. Dr. Drake states that "no arrows or Indian relics except grooved hammer stones had been found before 1917, when the soil began to drift. The light soil was blown off to from one to three feet in depth and the arrows appeared on the hard soil beneath. An area about eleven miles long by four miles wide lying north of a series of hills and between them and a lake-bed has blown clear, and arrows, etc., are found over the whole of this area. They are specially found over areas where the stone tepee rings were earlier removed and where a very large amount of broken stone and chipping (which could be gathered up by the basketful) are now found. These camping sites are found beside springs and water courses and cover from three to ten acres and in the spot where the arrows sent to the

Museum are found, the series of springs three miles west of here (Caron) from which Moose Jaw, Sask., draws its water supply, cover a full quarter section of land. We have found about one hundred and fifty perfect arrows from one new site of about two acres this summer, searching after each sand blow. The materials of which arrows are made run about as shown in illustration, largely brown translucent agatised wood and white quartz, glassy basalt, a few limestone and about one per cent. of each moss agate, with translucent agate, and obsidian, and a very occasional borded agate one.

The quartz can be obtained from local pebbles and boulders, but no raw



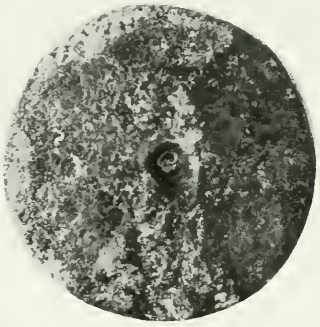
No. 38455—Turtle backs.

material of the other varieties are found about here. The nearest place I know of at which agatized wood is found is along the Milk River, in Southern Alberta, and the nearest supply of obsidian, the Rocky Mountains. No single piece of the translucent brown agatized wood or obsidian is found on the village sites that does not show chipping into small pieces, so it must have been difficult to obtain. There is not a single chert specimen similar to Ontario in my nine hundred from here. No single spearhead of more than three inches has been seen in over fifteen hundred specimens examined.

The turtle backs, No. 38455 which I sent to the Museum, are a very average assortment and much the greater percentage are of the agatized wood. To my mind these are not scrapers, but a step in the making of the arrowheads, from

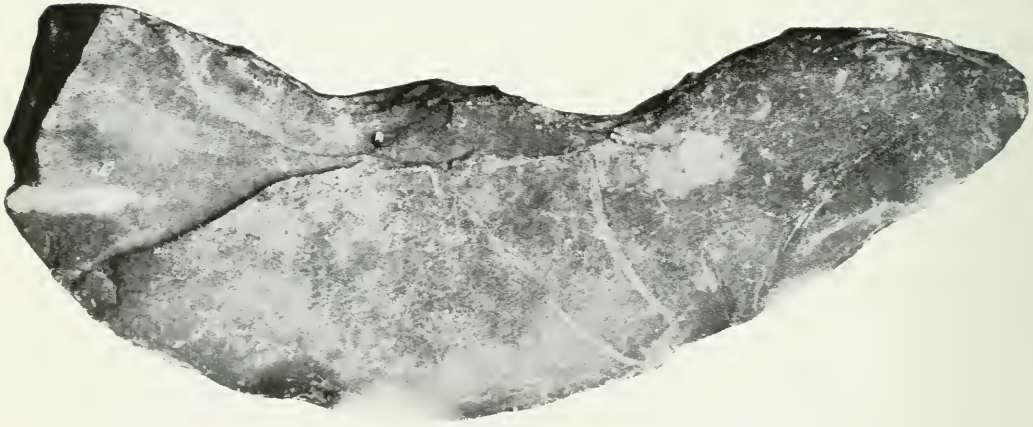
No. 38447—Arrow-heads, Sask. (full size).

their size, number (two to every arrowhead), and because all stages up to the completed arrow are found. As you will notice, a large number have an end broken off, only a few are found pointed and whole. It looks as though they worked first one side from the base towards the point, but in chipping the point it was broken and the material, as a turtle back, discarded without work on the other side.



No. 38444—A gambling stone (full size).

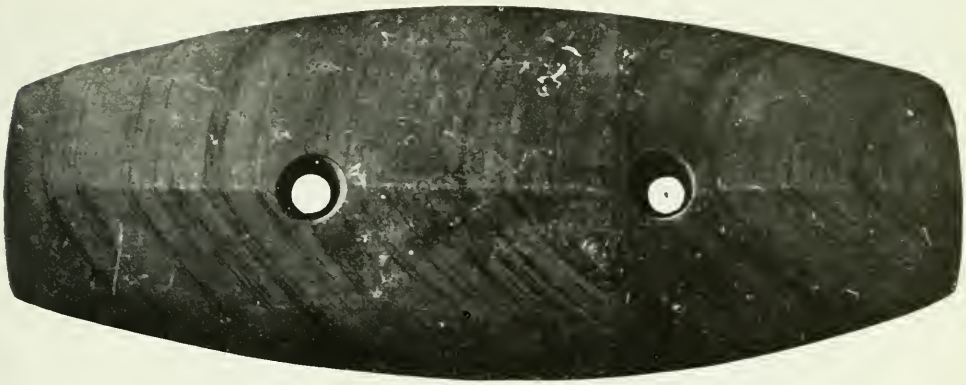
No. 38444, a gambling stone from near Lindsay and presented to the Museum by Mr. F. D. Moore, K.C. It is composed of phosphate of lime—well made and highly polished. There is a drilled hole on both sides.



No. 38348—Knife (full size).

No. 38348 (Graburn Collection). This is an elegantly finished slate knife, found in the Township of Otonabee. It may have been used either with or without a handle, yet while the upper part of it has been slightly chipped, the edge of the knife is in a good state of preservation.

Tools for the purpose of cutting were absolutely indispensable to our aborigines, and much ingennity was manifested by the various tribes in this province (Ontario). The uses to which the knife was put were innumerable, and every material capable of taking and retaining an edge was utilized.

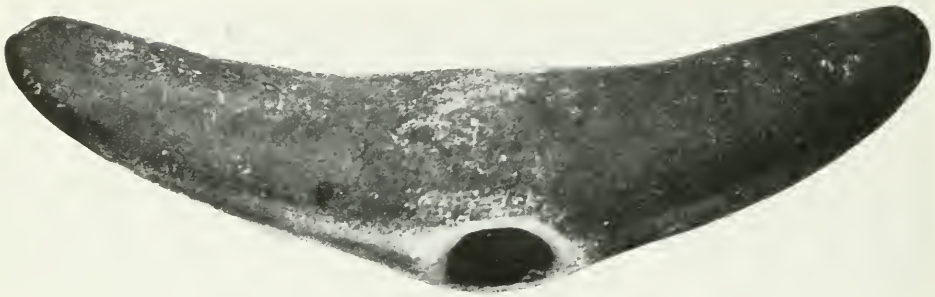


No. 38429—Gorget (full size).

No. 38429 (Graburn Collection). This striated slate gorget, also from Peterborough County, is very uniformly made. The lower side is perfectly flat while the surface illustrated is elevated, a central ridge running from end to end. The perforations, which are sunk, only from one side, are directly through the ridge. The holes have no appearance of wear; the ends are square, one being slightly longer than the other. Several similar gorgets are in the Museum.

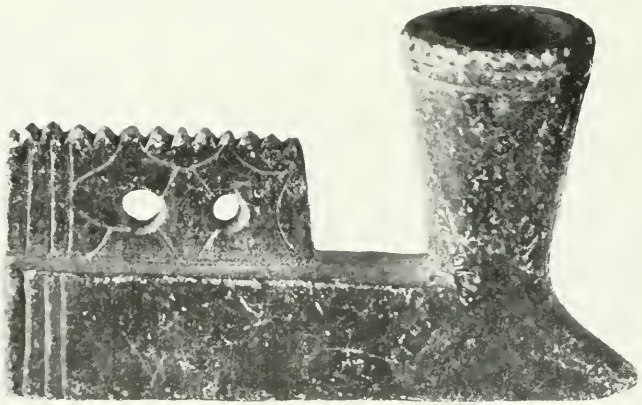
No. 38337—Stone pipe (full size).

No. 38337 is a stone pipe found east of Peterborough, and presented to the Museum by Mrs. John Graburn. This pipe is very similar to a number of pipes in the Provincial Museum, and also a number of stone pipes found in the neighbourhood of Lake Medad, near Waterdown. The head, facing the smoker, has been broken off, otherwise, it is very uniform and well made. The stem shows no evidence of the teeth marks of the smoker. The American Indian held his pipe in his hand and smoked with his lips to the pipe stem, thus in very few cases you find any marks.



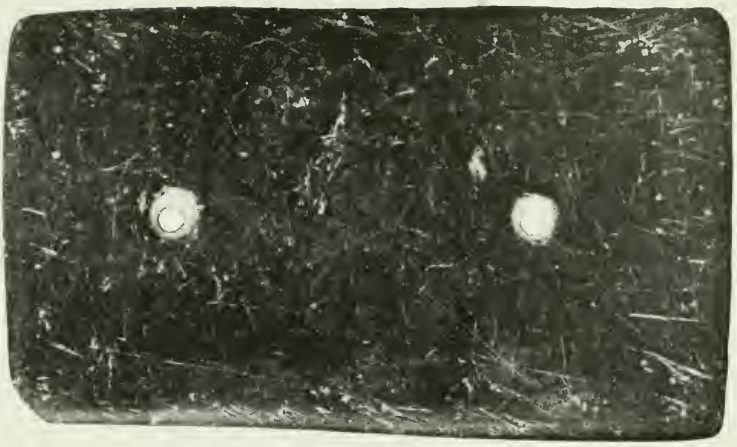
No. 38264—Banner stone (full size).

No. 38264. Banner Stone. This banner stone was found at Pointe Pelee on Lake Erie and was presented to the Museum by the Rev. A. W. Shepherd of Dale Presbyterian Church, Toronto. The photogravure is full size; the stone is not geometrically perfect as one side is slightly more worn than the other. There is a ridge from the hole in the centre to the tips of the horn. Where the hole passes through the centre the stone is slightly but symmetrically enlarged at both sides as if for the purpose of strengthening the artifact. The use of these artifacts is not very well ascertained. It is an excellent specimen of this variety. There is a very large number in the Provincial Museum, some of them of the horn type in which large knobs are tipping each point of the horn. Some of these specimens in the Museum have no ridge projecting to the outside. The horn banner stones are not very numerous in Ontario. There are some to be found also in the various private collections throughout the Province.



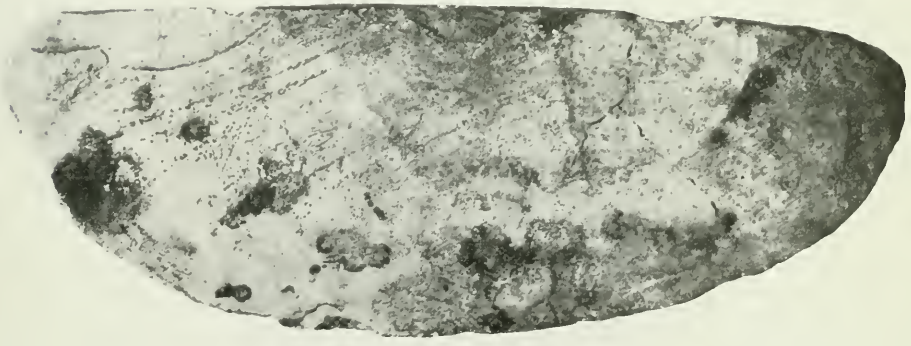
No. 38216—Siouan pipe (full size).

No. 38216. Siouan Pipe. This pipe, like 38217-8, is from the Northwest Territories and of soap-stone. It is a strictly characteristic Siouan pipe. A perforated wing extends along the base. This wing is perforated in two places, probably for the purpose of attaching a cord. Pipes of this type appear to have been distributed over a wide area, especially when made from catlinite. McGuire states that the prow of the typical Siouan pipe appears to give place on the northern and western borders of their territory to a rectangular-stemmed pipe, often having a ring around its stem in relief and a shortened prow, as is observed among the Ojibways who are of Algonquin stock.



No. 38428—Gorget (full size).

No. 38428 (Graburn Collection). This gorget, found in the same locality, is flat on both sides and is made of very dark slate. The perforations are countersunk and are in the median line from side to side but one is slightly nearer the extremity than the other. The holes have the appearance of some use.



No. 38224—Slate knife (full size).

Slate knife No. 38224. This knife of gray mottled slate was found in the North-west Territories. It is well made and even after these centuries it retains a very good edge. Cutting tools were absolutely necessary to primitive man, and our northern tribes in Ontario showed the greatest ingenuity in their manufacture. Almost every material capable of taking an edge was utilized—metal, chert, slate, shell, bone, antlers, reed and wood. Teeth are nature's cutlery tools and the teeth of animals, shark, beaver, and others were much employed by our Indian races. Natural forms were usually modified to make the tool more effective.

No. 38353—Granite adze (full size).

No. 38353. Adze found near Lansing on Yonge Street, County of York, was presented to the Museum by Mrs. John Graburn. It is one of the few

mottled granite adzes in the Museum. The outline is exceedingly regular and even at the present time after hundreds of years of exposure the edge is fairly good.

No. 38217—N.W. pipe (full size).

No. 38218—N.W. pipe (full size).

Nos. 38217-38218. Two pipes presented to the Museum by Col. Jos. Deleware. These pipes are described by Prof. McGuire, who has named them Micmac pipes. These came from the North-west Territories, and are old. They are of mottled soap-stone. There is no evidence of any work on them other than Indian. The bowl in shape is not unlike an inverted acorn, which sets upon a keel-like base. Through the top of this base or keel there is drilled a stem-hole over half its length, until it intersects at right angles the base of the bowl. The top of these terraced bases is seldom more than half an inch wide through from front to back. They are often as much as three inches long. Through this base there are almost invariably one or more perforations. In the larger of these two pipes the hole at the base has not been completed though started from both sides. Pipes similar to these have been found from Kentucky to Labrador, and from Labrador to the Rocky Mountains.

No. 38215—Bird amulet (full size).

No. 38215. Bird Amulet I. Represents an example of a large class of artifacts found all over the continent from the Gulf of Mexico to the Hudson Bay. This piece has had its head broken off, but in other respects resembles many to be found in the Museum collection. It was found during building the G. W. R. between Oakville and Bronte. The holes at the extremities are bored as usual, bevelled from both surfaces and at the narrowest point at the centre the hole is not more than an eighth of an inch in diameter.

It may reasonably be concluded from the uniform shape of this article, and from its apparent unfitness as an implement, as also from the wide range of its occurrence, that it was invested with a conventional significance as insignia or badge of distinction, or as an amulet. We know that the custom of wearing

certain stones as a prophylactic, or as safeguards against accidents or the malice of evil spirits, has not been confined to one continent or a single age. It is not entirely obliterated among certain classes of our own people. Regal authority is still indicated by rich baubles of gold and gems. It matters little whether the index of royalty be a sceptre, or a simple carved and polished stone, so that it is sanctioned by general recognition.

No. 38263—Catlinite pipe (full size).

No. 38263. Catlinite Pipe. This pipe was presented to the Museum by Dr. C. W. Gaviller, of Owen Sound. It is very old having been brought from the North-west many years ago. While the pipe is of Indian manufacture, it is modern. The outlines are not even excelled by pipes carved in pre-French days in Western Canada. This pipe has the general outline of one of the Calumet pipes so generally used in the West in the early days. The art concept here evidenced is one of the most thorough.

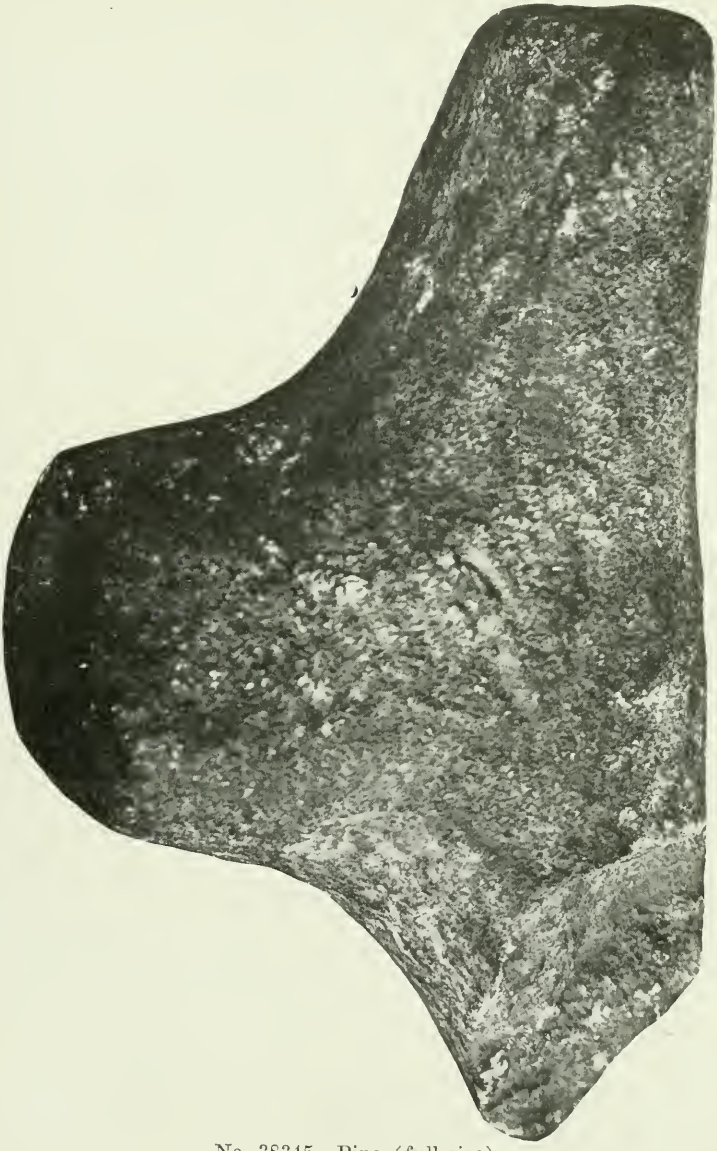
Catlin also describes the manufacture of pipes, saying: "The Indians shape out the bowls of these pipes from solid stone, which is not quite as hard as marble, with nothing but a knife. The stone, which is of a cherry-red, admits of a beautiful polish, and the Indian makes the hole in the bowl of the pipe by drilling into it a hard stick, shaped to the desired size, with a quantity of sharp sand and water kept constantly in the hole, subjecting him, therefore, to a very great labour and the necessity of much patience."

He says: "The shafts or stems of these pipes are from two to four feet long, sometimes round, but most generally flat, of an inch or two in breadth, and wound half their length or more with braids or porcupine quills, and often ornamented with the beak and tufts from the woodpecker's head, with ermine skins and long red hair, dyed from white horse hair or the white buffalo's tail. The stems of these pipes are carved in many ingenious forms and in all cases they are perforated through the centre, quite staggering the enlightening world to guess how the holes have been bored through them, until it is simply and briefly explained that the stems are uniformly made of the stalk of the young ash, which usually grows straight and has a small pith through the centre, which is usually burned out with a hot wire, or a piece of hard wood by a much slower process."

Primitive catlinite pipes, as stated, have been entirely without ornamentation, though the more recent examples are often most elaborately carved or have their surfaces inlaid with neat figures cut into the stone and filled in with sheet lead, the whole surface being subsequently rubbed to a uniform smoothness, the contrast of the gray of the lead and the Indian red of the stone producing a most pleasing effect. The colour of catlinite varies from dark red to light pink, and specimens are in the U. S. National Museum collection of mottled pink and white. Where the glazed surface is encountered, as it not unfrequently is, there is usually evidence of modern manipulation. Much of the romance of the Indian is connected with this pipe stone, supposed to have been presented to him by the Manito, and to have also sacred, valuable, and mysterious properties, its significance of peace or war, all being themes fruitful of praise of this handsome stone, which certainly answers admirably for pipe material.

No. 38259—Ceremonial stone artifact (full size).

No. 38259 is a ceremonial stone artifact; it was found on the Miller Farm, York Township, in the same village site where the large pot was found. For what purpose stones of this kind were used is problematical. A stone similar to this was found at Port Dover and is of polished sandstone.



No. 38345—Pipe (full size).

No. 38345 is a large striated sandstone pipe bearing evidence of considerable wear. Was found east of Peterborough and presented to the Museum by Mrs. John Graburn. It weighs 30 ozs., and is fairly well made, though not perfectly regular. One side of the bowl is almost three times as thick as the other. Other proportions are fairly symmetrical and somewhat after the monitor type of pipe. All the borings are of the usual kind but much more crude than in some pipes. Pipes such as this one, were probably used for ceremonial purposes or peace pipes.

NEW MATERIAL.

38213—Mealing stone, Bass Lake, Simcoe Co., Ont. Gift of J. Hugh Hammond, Esq., Orillia, Ont.

38214-38244—Gift of Col. J. M. Delamere, Toronto, Ont.

38214—Pipe stem.
38215—Bird amulet, found near Oakville, when building.—G.W.R.
38216—Stone pipe.
38217—Stone pipe. Northwest Territories.
38218—Stone pipe. Northwest Territories.
38220-23—Fragments of pottery.
38224—Slate knife.
38225-26—Stone adzes.
38227-42—Chert specimens.
38243—Shell gorget.
38244—War club (wood).

38245-38257—Gift of Frank S. Wood, Esq., Hamilton, Ont.

38245-9—Bone beads.
38350—Head of a bird amulet.
38251-38257—Arrow-heads and scrapers.

38258-38260—Gift of Dr. Rowland B. Orr, Toronto, Ont.

38258—Military water bottle.
38259—Problematic stone implement, York Tp.
38260—Head of bird amulet, Baby Point.

38261—Eight Indian buttons made from deer horn. Gift of C. A. H. Clark, Esq., Toronto, Ont.
38262—Arrow-head. Gift of Jas. McPherson, Esq., Dundalk, Ont.
38263—Catlinite pipe. Gift of Dr. C. W. Gaviller, Owen Sound, Ont.
38264—Ceremonial Stone, Point Pelee. Gift of Rev. A. W. Shepherd, Toronto, Ont.

38265-38282—Stone axes or adzes, found near Guelph, Ont. Gift of H. A. Van Wickel, Esq.

38283—Cree Indian beaded tobacco bag, Manitoba. Gift of C. W. Nash, Esq., Toronto, Ont.

38284—Large beaded Indian pouch. From the effects of the late Frederick W. Devoe, 59 Park Ave., New York City, N.Y., U.S.A. Gift of Miss H. E. Devoe and Miss M. A. Hunter.

38285—Flint implement, England. Gift of H. A. Van Wickel, Esq.

38286-38291—Gift of Dr. Rowland B. Orr, Toronto, Ont.

38286—Bone bead, Vaughan Tp.
38287-8—Bone awls, Vaughan Tp.
38289—Tooth, Vaughan Tp.
38290—Arrow-head, Vaughan Tp.
38291—Part of a banner stone.

38292-38443—Gift of Mrs. John Graburn, Toronto, Ont.

Found in Otonabee Township, Peterborough County, Ont.

38292-38300—Bone awls.
38301-38306—Beer teeth.

38307—Horn flint chipper.
38308-38320—Foot bones.
38321—Fragment of Indian skull.
38322-38324—Bone awls.
38325-38328—Togle spear-head, Esquimo.
38329—Bone implement, Esquimo.
38330—Bone handle, Esquimo.
38331—Small bone ornament, Esquimo.
38332—Indian shell necklace.
38333—Bone bead.
38334—Bone bead (black).
38335—Hide scraper (elk horn), Manitoba.
38336—Copper spear-head.
38337—Stone pipe.
38338—Clay pipe.
38339-38343—Gorgets.
38344—Slate spear head.
38345—Large stone pipe.
38346-38347—Pendants or gorgets.
38348—Slate knife.
38349—Slate spear-head.
38350—Slate knife.
38351—Stone pipe.
38352—Gouge.
38353—Gouge.
38354—Knife.
38355—Large stone pipe.
38356—Iron tomahawk.
38357—Iron tomahawk.
38358—Stone bead.
38359-38366—Stone axes.
38367-38377—Stone axes.
38378-38400—Stone axes.
38401-38413—Stone axes.
38414-38415—Grooved axes.
38416—Net sinker.
38417—Gorget.
38418—Pestle, Madison Co., Indiana, U.S.A.
38419—Gouge.
38420—Iron tomahawk.
38421-38422—Fragments of gorgets.
38423—Eight-seven chert, scrapers, arrow-heads, etc.
38424—Wood spoon (turtle).
38425—Large stone gouge.
38426—Pestle.
38427—Copper spear-head.
38428—Gorget.
38429—Gorget.
38430-38431—Stone axes.
38432—Sandstone pipe.
38433—Fragments of stone axe.
38434—Gouge.
38435—Gouge.
38436—Spear-head (chert).

38437-38439—Arrow-heads.
38440—Rubbing stone.
38441—Stone axe.
38442—Stone gouge.
38443—Mortar.
38444—Stone disc, Lot 25, Con. 5, Brock Tp., Ontario Co., Ont. Gift of F. D. Moore, Esq., K.C.
38445—Stone implement. Gift of F. D. Moore, Esq., K.C.
38446—Pair of snow-shoes, Labrador.
38447-38456—Gift of Dr. T. G. H. Drake, Caron, Sask. Found 3 miles west of Moose Jaw, Sask.
38447—Eight fragments of pottery.
38448—Twenty-four arrow-heads, various forms.
38449—Twenty-eight scrapers of various material.
38450—Eighty imperfect arrow-heads of various material.
38451—Forty pieces, chippings of various material.
38452—Iron arrow-head.
38453-38456—Pieces of sheet brass.
38457—Chippeway pipe, Manitoulin Island. Gift of Frank Eames, Esq., Toronto, Ont.
38458—Indian basket, Yakutal, Alaska. Gift of A. H. Gottschall, Esq., Harrisburg, Pa., U.S.A.
38459—Indian basket, Makah, near Bay, Washington. Gift of A. H. Gottschall, Esq., Harrisburg, Pa., U.S.A.

UNIVERSITY OF TORONTO

REPORT OF THE

BOARD OF GOVERNORS

FOR THE

YEAR ENDING 30th JUNE

1920

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

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UNIVERSITY OF TORONTO

REPORT OF THE

BOARD OF GOVERNORS

For the year ending 30th June, 1920

To His Honour the Lieutenant-Governor in Council:—

The Governors of the University of Toronto have the honour to submit their fourteenth annual report, with which is incorporated the President's report upon the academic work of the University and its Colleges for the Session 1919-20, together with the reports of various departments. There is also included the customary detailed statement of the receipts and expenditures of the Board for the fiscal year which closed on 30th June, 1920, which has been duly audited in accordance with the provisions of the University Act.

During the year the erection of the new building for Electrical Engineering was proceeded with as rapidly as conditions permitted, there having been expended thereon to 30th June $126,304, which will be provided from the grant of $350,000 voted by the Legislative Assembly for the purpose. It had been hoped that the building would be available for use this Session, but this expectation will not be realized owing to unavoidable delays in obtaining delivery of material.

The new building for the University Press, which had quite outgrown its quarters in the basement of the Library, was begun in the early summer on the site of the house formerly leased to Professor Mavor, and was completed in time for occupation at the opening of the Session 1920-21. The cost will be about $60,000, towards meeting which there was a surplus on 30th June of some $16,000, and it is anticipated that the earnings of the Press in the next five or six years will be sufficient to pay off the balance. The Board have directed that the surplus from year to year be so applied. The Students' Book Department has also been given accommodation in the building and will be charged a fair rental for the same.

The gross revenue for the year was $1,068,519. The deduction of interest written to Scholarship and other Trust Funds, $11,705, and of interest paid for bank accommodation, $989, left a net revenue of $1,055,825, which is an increase of $71,091 over the previous year. This increase is entirely due to fees, the receipts under this head, owing to the large registration of students, having reached $382,559 as against $235,902 in 1918-19, a difference of $146,657; thus not only equating the withdrawal of the item of Dining Hall receipts (formerly carried in the Revenue account, but now taken over by the Hart House administration) which reached some $82,000 in 1918-19, but providing in addition a substantial increase over the ordinary estimated revenue of the year.

The total expenditure under the appropriations for salaries and maintenance was $1,509,311. This figure exceeds that of 1918-19 ($1,191,602) by $317,709. The increase is accounted for in a variety of ways. The item of salaries amounted to $156,203 more than the previous year, $811,473 as against $655,270,

and that of Special Research to some $47,000 more. The honoraria paid to Deans Baker, Ellis and Fernow and to Professor McPhedran upon their retirement from the staff after many years of service was an abnormal item for last year of $12,500. The expenditure upon the Library shows an increase of $21,500, due mainly to the installation of an additional metal book stack at a cost of some $18,000, and to the necessity for a larger grant for books and back numbers of periodicals which could not be obtained during the war. The constantly mounting cost of fuel and and wages was responsible for an increase of nearly $6,000 in the operation of the Central Power Plant, an item which will be still greater in 1920-21. The high cost of labour and materials in the year under review was also responsible for increases in the maintenance of almost every building and department. Further, the necessity for converting old boiler rooms and other basement space into workrooms and laboratories on account of the pressure upon all available rooms, and re-arrangement and alterations of quarters in various buildings so as to cope as far as possible with the great influx of students, required higher expenditure in every direction. The Main Building shows an increase of approximately $11,500, the Chemical Building and Department $9,000, the Physics Building and Department $7,000, Bio-Chemistry $4,000. The Department of Surveying accounts for some $10,000, due to the expenditure upon the buildings at the site in the Township of Lutterworth purchased for the purpose of the summer camp, and work connected therewith. Examinations cost some $7,000 additional, and the expenses of the administrative departments, the Bursar's, Registrar's and Superintendent's offices, were likewise heavier to the extent of a further $7,000. Contingencies and Miscellaneous show an increase of over $7,000, due largely to a grant of $5,000 made by the Board to the Alumni Association for work done by them in extending and correcting the available records of graduates, which have been turned over to the University in an improved condition. Other items, of minor importance in themselves, contributed to the aggregate increased expenditure.

The difference between the available revenue, $1,055,825, and the expenditure, $1,509,311, is a shortage of $453,496. Towards this the Board had in hand from the previous year $44,175, and they received from Your Honour-in-Council the special grant of $400,000 voted by the Legislative Assembly for 1919-20. The application of these two sums reduced the deficiency upon the year's operations to the sum of $9,311, which remains at the debit of the account.

All of which is respectfully submitted.

B. E. Walker,

Chairman.

Toronto, 29th November, 1920.

PRESIDENT'S REPORT

1919-1920

To the Governors of the University of Toronto:

GENTLEMEN,—I beg to submit the following report on the academic work of the University and University College during the twelve months ended June 30th, 1920.

The total staff of the University and University College numbered 509, of whom 66 were professors, 44 associate-professors, 35 assistant-professors, 78 lecturers and associates (in medicine) and instructors in the Faculty of Education, 286 demonstrators, fellows and instructors with sessional appointments. They were distributed as follows:—

—	Professors.	Associate Professors.	Assistant Professors.	Associates.	Lecturers.	Other Sessional Appointments.
University (Faculty of Arts)	26	11	16	.....	18	77
University College	13	3	7	.....	6	5
Faculty of Medicine	15	17	1	9	4	143
Faculty of Applied Science	9	9	4	.....	14	37
Faculty of Household Science	.....	2	.....	.....	3	6
Faculty of Forestry	.....	1	2	.....	.....	1
Faculty of Music	.....	.....	.....	.....	4	.....
				Lecturers and Chief Instructors.	Assistant Instructors.	
Faculty of Education	2 Director.	1	5 Director Field Work	3	17	4
Social Service Courses	1	.....	1	.....	.....	12

In Victoria College there were:

Professors (one in University)	13
Associate Professors	5
Lecturers	4
Special Instructor	1

In Trinity College there were:

Professors	10
Lecturers	8

In St. Michael's College there were:

Professors	12
Lecturers	10

I regret to report the death of Dr. R. J. Dwyer, Associate-Professor of Medicine and head of the department of Clinical Medicine in St. Michael's Hospital, who passed away after a long illness on January 26th, 1920. Dr. Dwyer was an unusually skilful physician and teacher.

On the 19th of June, 1920, Dr. Peter Toews, Assistant-Professor of German, died after a long illness. Several years before his death Dr. Toews had withdrawn from the active duties of the University. He was a good scholar and faithful teacher.

At the close of the session Dr. C. K. Clarke resigned his position as dean of the Faculty of Medicine after eleven years of service. His tact, sympathy and interest in the development of scientific medicine made his deanship memorable, and during his tenure of office many developments were initiated which will have most important permanent effects on the advance of medicine in this University.

Dr. J. A. Amyot, Professor of Hygiene, resigned 31st December, 1919, in order to assume the duties of the newly created post of Deputy Minister of Public Health for the Dominion of Canada at Ottawa, to the regret of the University to which he rendered excellent service for twenty-five years.

Dr. G. H. Burnham, Professor of Ophthalmology and Otology; Dr. N. A. Powell, Professor of Medical Jurisprudence; Dr. A. M. Baines, Associate-Professor of Clinical Medicine and Pediatrics; and Dr. H. T. Machell, Associate-Professor of Obstetrics, resigned on the 30th of June, 1920. The University is deeply indebted to all these gentlemen for the long and unselfish service that they have devoted to the advancement of medical instruction and practice through the Faculty of Medicine.

The following new appointments and promotions were made during the year:—

In the Faculty of Arts,—Appointments: C. K. Clarke, M.D., LL.D., was appointed Director of the Psychological Laboratory; Andrew Hunter, M.A., B.Sc., M.B., Ch.B. (Edin.), Professor of Biochemistry; John Macnaughton, M.A., LL.D. (Queen's), Professor of Latin; H. B. Speakman, M.Sc. (Manchester), Associate-Professor of Zymology: Gilbert E. Jackson, B.A. (Cantab), Assistant-Professor of Political Economy; A. C. Redfield, B.S., Ph.D. (Harvard), Assistant-Professor of Physiology: W. H. T. Baillie, M.A., M.B., Lecturer in Histology: T. H. Black, M.A., B.Sc., LL.B. (Glasgow), Lecturer in Roman Law; A. R. Clute, B.A., LL.B., Lecturer in Federal and Constitutional Law; E. H. Craigie, B.A., Lecturer in Comparative Anatomy; G. H. Duff, M.A., Lecturer in Botany: W. A. Irwin, M.A., D.B. (Chicago), Lecturer in Oriental Languages; Herbert Marshall, B.A., Lecturer in Political Economy; W. H. Martin, B.A., Lecturer in Chemistry; J. W. MacArthur, A.B. (Oberlin), M.A. (Wabash), Lecturer in Experimental Biology; G. C. Patterson, B.A., Lecturer in Italian and Spanish; E. J. Pratt, Ph.D., Lecturer in Psychology; and Miss M. M. Waddington, Ph.D., Lecturer in English.

Promotions—F. B. Allan, Ph.D., from an associate-professorship to a professorship in Organic Chemistry: F. B. Kenrick, M.A., Ph.D. (Leipzig), from an associate-professorship to a professorship in Chemistry; A. L. Parsons, B.A. (New York), from an assistant-professorship to an associate-professorship in Mineralogy; G. M. Smith, M.A. (Oxon), from an assistant-professorship to an associate-professorship in History; G. Oswald Smith, M.A. (Oxon), from an assistant-professorship to an associate-professorship in Latin; R. Hodder Williams, M.A. (Oxon), A.M. (Columbia), from an assistant-professorship to an associate-professorship in History: A. G. Brown, M.A. (Oxon), from a lectureship to an assistant-professorship in Ancient History; J. T. Burt-Gerrans, Phm.B., M.A., from a lectureship to an

assistant-professorship in Electro-chemistry; W. A. Clemens, M.A., Ph.D. (Cornell), from a lectureship to an assistant-professorship in Elementary Biology; A. F. Coventry, B.A. (Oxon), from a lectureship to an assistant-professorship in Vertebrate Embryology; C. N. Cochrane, M.A. (Oxon), from a lectureship to an assistant-professorship in Ancient History; F. C. A. Jeanneret, B.A., from a lectureship to an assistant-professorship in French; W. P. M. Kennedy, M.A. (Oxon), Litt.D. (Dublin), from a lectureship to an assistant-professorship in History; A. MacLean, B.A., from a lectureship to an assistant-professorship in Geology; H. A. McTaggart, B.A. (Cantab), from a lectureship to an assistant-professorship in Physics; M. Moraud, L.ès L., Dip. D'Et. Sup. from a lectureship to an assistant-professorship in French; I. R. Pounder, M.A., from a lectureship to an assistant-professorship in Mathematics; W. D. Woodhead, B.A. (Oxon), M.A. (Alberta), from a lectureship to an assistant-professorship in Greek.

In the Faculty of Medicine,—Appointments: Duncan Graham, M.B,. Professor of Medicine; Alan Brown, M.B.. Associate-Professor of Medicine in charge of Pediatrics: Perry Goldsmith, M.D., C.M., Associate-Professor of Oto-Laryngology; Gilbert Royce, B.A., M.B., Associate-Professor of Oto-Laryngology: J. G. Cunningham, B.A., M.B., Lecturer in Industrial Hygiene; R. D. Defries, M.D., D.P.H., Lecturer in Hygiene; H. B. Maitland, M.B., M.R.C.S., L.R.C.P., Lecturer in Pathology and Bacteriology; and H. K. Detweiler, M.D., A. A. Fletcher, M.B., R. Jamieson, B.A., M.B.. N. M. Keith, B.A., M.D., Clinicians in Medicine.

Promotions—J. G. Fitzgerald, M.B., from an associate-professorship to a professorship in Hygiene; V. E. Henderson, M.A., M.B., from an associate-professorship to a professorship in Pharmacy and Pharmacology; and W. B. Hendry, B.A., M.B., from an associateship to an associate-professorship in Obstetrics and Gynæcology.

In the Faculty of Applied Science,—Appointments: C. H. Mitchell, C.E., LL.D., Dean; S. G. Bennett, B.A.Sc., Lecturer in Commercial Engineering; H. J. Brownlee, M.A., Lecturer in Chemical Engineering; J. W. Melson, B.A.Sc., Lecturer in Surveying: W. E. Milligan, B.A.Sc., Lecturer in Metallurgy; R. C. Mitchell, B.A.Sc., Lecturer in Hydraulics; M. R. Riddell, B.A.Sc., Lecturer in Machine Design; G. H. Wilkes, B.A.Sc., Lecturer in Machine Design; and W. J. T. Wright, B.A.Sc., Lecturer in Drawing.

Promotions—H. W. Price, B.A.Sc., from an associate-professorship to a professorship in Electrical Engineering; E. G. R. Ardagh, B.A.Sc., from an assistant-professorship to an associate-professorship in Analytical Chemistry; J. Roy Cockburn, B.A.Sc., from an assistant-professorship to an associate-professorship in Descriptive Geometry; T. R. Loudon, B.A.Sc., from an assistant-professorship to an associate-professorship in Ferro-metallurgy; A. W. McConnell, B.A.Sc., from an assistant-professorship to an associate-professorship in Architecture; W. M. Treadgold, B.A., from an assistant-professorship to an associate-professorship in Surveying; C. R. Young, B.A.Sc., C.E., from an assistant-professorship to an associate-professorship in Applied Mechanics.

In the Faculty of Forestry, C. D. Howe, M.A. (Vermont), Ph.D. (Chicago), was appointed Acting Dean.

The total number of students registered in the University in 1919-1920 was 5,237, or apart from those registered in the Summer Session and Occasionals in Social Service, 4,870, distributed as follows:—

Faculty of Arts:—

	Men.	Women.	Total.
University of Toronto	104	45	149
University College	587	447	1,034
Victoria College	288	212	500
Trinity College	74	49	123
St. Michael's College	119	66	185
Graduate Courses	118	51	169
Faculty of Medicine	1,203	81	1,284
Faculty of Applied Science	815	4	819
Faculty of Education	211	212	423
Faculty of Forestry	48	....	48
Faculty of Music	11	9	20
Department of Social Service	12	343	355
Returned Soldiers' Matriculation Class	172	....	172
Registered twice	36	8	44
	3,726	1,511	5,237

The figures may be further analyzed as follows.

Faculty of Arts.

University of Toronto.

	Men.	Women.	Total.
Teachers' Courses and Summer Session	30	34	64
Occasional Arts Students	11	11	22
Veterinary Students	63	....	63
	104	45	149

University College.

	Men.	Women.	Total.
First Year Undergraduates	279	161	440
Second Year Undergraduates	123	116	239
Third Year Undergraduates	97	102	199
Fourth Year Undergraduates	55	57	112
Occasional Students	34	11	45
Duplicate Registration	1	....	1
	587	447	1,034

Victoria College.

	Men.	Women.	Total.
First Year Undergraduates	94	81	175
Second Year Undergraduates	62	34	96
Third Year Undergraduates	61	39	100
Fourth Year Undergraduates	33	50	83
Occasional Students	39	8	47
Duplicate Registration	1	....	1
	288	212	500

Trinity College.

	Men.	Women.	Total.
First Year Undergraduates	32	20	52
Second Year Undergraduates	20	16	36
Third Year Undergraduates	12	8	20
Fourth Year Undergraduates	10	4	14
Occasional Students	....	1	1
	74	49	123

St. Michael's College.

	Men.	Women.	Total.
First Year Undergraduates	51	21	72
Second Year Undergraduates	27	27	54
Third Year Undergraduates	18	10	28
Fourth Year Undergraduates	15	8	23
Occasional Students	8	....	8
	119	66	185

Graduate Courses.

	Men.	Women.	Total.
Candidates for Ph.D.	30	3	33
Candidates for M.A.	53	33	86
Candidates for M.D.	9	1	10
Graduate Students	26	14	40
	118	51	169

Faculty of Medicine.

	Men.	Women.	Total.
First Year Undergraduates	391	25	416
Second Year Undergraduates	222	25	247
Third Year Undergraduates	175	13	188
Fourth Year Undergraduates	126	10	136
Fifth Year Undergraduates	88	7	95
Occasional Students	10	1	11
Dental Students	189	....	189
Candidates for D.P.H.	2	....	2
	1,203	81	1,284

Faculty of Applied Science.

	Men.	Women.	Total.
Candidates for Professional Degrees	8	....	8
First Year Undergraduates	401	....	401
Second Year Undergraduates	171	1	172
Third Year Undergraduates	139	1	140
Fourth Year Undergraduates	92	1	93
Students of other Faculties	3	1	4
Occasional Student	1	....	1
	815	4	819

Faculty of Education.

	Men.	Women.	Total.
Students registered	211	212	423

Faculty of Forestry.

	Men.	Women.	Total.
First Year Undergraduates	20	....	20
Second Year Undergraduates	15	....	15
Third Year Undergraduates	7	....	7
Fourth Year Undergraduates	2	....	2
Fifth Year Undergraduates	1	....	1
Sixth Year Undergraduates	1	....	1
Occasional Students	2	....	2
	48	....	48

Faculty of Music.

	Men.	Women.	Total.
First Year Undergraduates	4	....	4
Second Year Undergraduates	1	4	5
Third Year Undergraduates	3	....	3
Occasional Students	3	5	8
	11	9	20

Department of Social Service.

	Men.	Women.	Total.
Students registered	12	343	355

Preparatory Matriculation Class for Returned Soldiers.

	Men.	Women.	Total.
Students registered	172	....	172

The numbers examined in the different departments of the University, including those granted standing for Military Service, were as follows:—

Arts:		
Ph.D.	6	
M.A.	46	
Fourth Year	308	
Third Year	461	
Second Year	572	
First Year	731	
Senior Matriculation	207	
		2,331
Medicine:		
D.P.H.	2	
M.D.	6	
Fifth Year	88	
Fourth Year	130	
Third Year	182	
Second Year	227	
First Year, Five Years' Course	221	
First Year, Six Years' Course	154	
		1,010
Applied Science:		
Professional Degrees	8	
Fourth Year	93	
Third Year	139	
Second Year	164	
First Year	376	
		780
Education		338
Forestry		44
Music		9
Law		18
Degrees in Pedagogy		29
Pharmacy		92
Dentistry		848
Agriculture		59
Local Examination in Music		580
Veterinary Science		4
Social Service		280

The degrees conferred were:

LL.D. (Honorary)	14	
D.Sc. (Honorary)	3	
Mus. Doc. (Honorary)	1	
M.A. (Honorary)	1	
M.H.Sc. (Honorary)	1	
Ph.D.	5	
M.A.	42	
LL.B.	2	
M.D.	4	
D.P.H.	2	
M.B.	74	
B.A.	271	
C.E.	7	
M.E.	1	
B.A.Sc.	93	
D.Paed.	2	
D.D.S.	116	
B.S.A.	58	
B.Sc. (Agr.)	1	
B.Sc.F.	4	
Phm.B.	88	
B.V.Sc.	5	
		795

The outstanding characteristic of the year 1919-20 was the unprecedentedly large attendance of students. The total number of students was 5,237, which was larger than the attendance in the year 1918-19 by 1,881. It is obvious that an addition of nearly two thousand students to the University in one year has placed a heavy strain upon both the administrative and the teaching staffs. This was a feature, however, which was common to the universities of Britain and this Continent, and was due, of course, to the rapidity with which many of those who had been under arms resumed work which had been interrupted, or entered upon an academic course which they had intended to undertake. The most serious interruption was that suffered by boys at school who enlisted before they had completed their studies for matriculation. To return to school after the war was impossible for them; nor were they prepared to take up university work with profit. Hence it became necessary for the University, even at considerable expense, to institute new classes under special tutors in order to prepare returned soldiers for the reduced requirements for entrance into the several faculties. The subjects taught were those of Junior Matriculation, and new classes were formed at different periods, but were all brought to a conclusion in June, 1920. In all, 172 soldier-students were in attendance on these special classes during the academic year, and their work on the whole was most satisfactory.

The large numbers of the regular classes in the University were also due to the presence of about 1,200 ex-soldiers. Their earnestness was very marked, and in spite of the inevitable reaction their work in examinations was surprisingly good. Their maturity and self-control were powerful factors in the life of the University, and notwithstanding the large numbers and the relaxation after the strain of the war the general conduct of the students was good, and was such as to call for no further remark.

One hesitates to use lightly the term "epoch-making," but it is quite appropriate in referring to the opening of Hart House, which was performed by His Excellency the Duke of Devonshire in beautiful weather on Armistice Day, November 11th, 1919. What the University owes to the beneficent founders of this unique and comprehensive establishment by reason of this gift will only be realized after some years, as its effects will be seen in the bearing and character of the students

who will have enjoyed the privileges of its use; but even one session has already proved that the life of the men students has entered upon a new period of splendid promise. Undergraduates, graduates and staff share the advantages of this building, and the imposition of a compulsory fee gives every male student the right to equal privileges in it; the opportunities for social intercourse and physical exercise are unsurpassed.

Unfortunately the women students are without any similar headquarters. It is true that in University College the Women's Union under Miss Wrong has been a great boon, but one house cannot serve even as a modest social headquarters for the 450 women students of that College alone, to say nothing of those of other faculties. Under an energetic committee of ladies, consisting chiefly of graduates of the University, an effort has been begun to raise funds for a new Women's Union for University College, but the cost of building is so great that it is doubtful whether it can be erected as soon as the crying need would demand. But the opening of Hart House has only emphasized the longfelt want of a common building for the women of all the colleges and faculties. It should contain gymnasium, swimming-pool, and rooms for such meetings and social gatherings as are shared in by the university women as a whole.

Not the least difficulty encountered by students during the past year was the securing of accommodation in which to live, and this difficulty will continue for some time to come. The Residences for men and women were quite filled, and two houses on St. George Street were purchased to give further accommodation for the women of University College; but great numbers had to be satisfied with inconvenient quarters at high prices. As the neighbourhood of the University changes its character the need of greatly increased residential facilities will become even more urgent than at present.

Many of the returned men would have found great difficulty in carrying on their courses had it not been for the Loan Fund established by the Alumni of the University in connection with the War Memorial Fund. Sustained and repeated efforts were made by the Universities of the Dominion to secure for returned soldiers either grants or loans from the Dominion Government, but to no purpose, with the result that on the whole the student-soldiers suffered more than any other class for their patriotism, inasmuch as they not only lost the years of absence at the war, but the savings also they had made with which to educate themselves. Many found it necessary to postpone or even abandon their courses of study at this time of very high living. The Alumni Loan Fund Committee, however, granted loans without interest to 152 men, aggregating $37,477, and the Board of Governors co-operated by allowing these men the postponement of the payment of fees without interest. Similar loans will be required for at least two years. Thereafter the returned loans will be constituted a Scholarship Fund, from which the dependants of returned soldiers will receive assistance for an academic career.

The Alumni War Memorial Fund has been remarkably successful, some $335,000 having been already subscribed. Part of this will be devoted to the erection of a Gothic Memorial Tower and Screen with the names of the fallen at the south-west corner of Hart House; but the construction will not be proceeded with at present. The securing of this fund has been a powerful factor in rallying graduates of the University round their Alma Mater through their pride in and sympathy with what has been accomplished during the war by her sons. When the memorial volume now being prepared under the authority of the Governors, and soon to be published, appears, the extent of this sacrifice will become more manifest.

One of the pleasantest incidents of the year was the reunion of Applied Science graduates in December, who came from far and near and showed their well-known enthusiasm for and interest in the "School."

This year as never before the graduates of the University have taken a deep interest in its affairs. Of course this was partly due to the great efforts which they put forth to raise the War Memorial Fund, but the privileges of Hart House brought the men together, and at Commencement many interesting reunions were held. A new pride in the University has been created and has found expression and it is hoped that it will rapidly increase.

In the Faculty of Arts the most important event that calls for mention was the creation of a new course leading to a degree of Bachelor of Commerce. The entrance requirements to this course are the successful passing in at least three subjects of honour matriculation, English, Mathematics, and one of German, French, Spanish. Latin is an optional subject. Only the first year of the course has so far been prepared, to come into effect in the session 1920-21. The prescription of work for the second, third and fourth years will be defined in the Calendar for the session 1921-22, and will include advanced work in Economics, Mathematics, and the languages taken in the first year. Instruction will be given also in History, Accountancy, Business Methods, Administrative Efficiency, and Commercial Law. Before the completion of the course of four years a candidate must produce evidence of employment for a definite period in a commercial firm, in public service, or in some business capacity. It is proposed in establishing this course to prepare not only for business and commercial life generally, but also for the Consular Service and the foreign representation of Canadian firms.

The new experiment of a full-time professorship in Medicine, made possible by the gift of Sir John and Lady Eaton, has been carried out during the year with very great success by Dr. Duncan Graham. A reorganization of the medical services of the Toronto General Hospital was effected under Dr. Graham's direction. Four clinicians were appointed as Ward Supervisors, and patients were segregated according to types of disease. Five clinicians specially qualified in laboratory methods necessary for clinical diagnosis and investigations were appointed, and they devoted eight hours a day to necessary examinations of patients. The Out-patient Department was placed under clinicians specially qualified in general medicine. The majority of the teachers in Clinical Medicine are in private practice, but have charge of a certain number of patients in the hospital and teach without salary from four to nine hours a week. Clinical instruction has also been given in St. Michael's Hospital, Western Hospital, and the Hospital for Sick Children. An endeavour has been made by means of weekly meetings of the staff to unify the method and subject matter of teaching.

The sub-department of Pediatrics also was reorganized, with Dr. Alan Brown in charge. He was appointed head of the Medical Service of the Hospital for Sick Children, and devoted the portion of the Sir John and Lady Eaton gift specified for this department to securing skilled secretarial and research assistance as well as supplies. Through his efforts also several valuable donations have been made to equip this hospital with library and apparatus for the better instruction of medical students.

During the winter Dr. George Vincent and Dr. Richard C. Pearce of the Rockefeller Foundation visited the University to study the local conditions in Medicine in view of the offer of $5,000,000 made at New Year by Mr. John D. Rockefeller to Canadian Universities for the promotion of the science and teaching

of medicine. The Faculty submitted to them an elaborate report on the development, which, in their judgment, should be attempted during the next few years, and they expressed themselves as pleased with the present standards of the Faculty and its aims.

In this Faculty the pressure of students was felt much more severely than in any other, because for several years soldiers who interrupted their medical studies had been returning, with the result that the final years were much larger than in other faculties. Last session was also the first of the new course of six years, and its opening was awaited with much interest. As the former five years' course was retained for returned soldiers, there were two concurrent first years, though for the most part with separate courses of instruction. The attendance in the first year of the new six years' course surprised the Faculty in regard to its size, and threw upon the laboratories, class-rooms and staff a load which it was very difficult for them to carry. Indeed, the congestion was such that it will be necessary to limit numbers as soon as possible, as there are not in Toronto sufficiently large clinical facilities to train in the final years the numbers that will be in attendance if present conditions continue. The standard of Junior Matriculation for entrance is too low. Soon it should be raised to Honour Matriculation in at least three subjects, which should be attainable now in the good schools of the Province by average boys at the age of eighteen years. The first year of the new course has so far been satisfactory. The combination of options, such as English, French, History of Science or Mathematics with the three fundamental pre-medical sciences of Chemistry, Physics and Biology has worked well and a high standard was maintained. It seems probable that this course, which in several aspects is unique, will prove to be well designed to turn out a broadly educated as well as an expert medical man.

On Wednesday, October 8th, 1919, Brigadier-General C. H. Mitchell, C.B., C.M.G., D.S.O., gave his inaugural lecture as Dean of the Faculty, taking as his subject "The Future of Applied Science." He has thrown himself with great energy into his work, has rallied his staff round him and is leading the faculty into a bright future.

The attendance of the first year in this Faculty also was extremely large, again the result of the return of the soldier. The securing of accommodation proved a problem, but the erection of the new Electrical and Strength of Materials building promises relief for the ensuing session.

During the year Dr. Howe acted as Dean of the Faculty of Forestry, taking the place of Dr. Fernow, who had resigned at the end of the previous session, and he has fulfilled the duties of the office to the complete satisfaction of the University.

The Graduate work of the University is increasing. The post-graduate fellowships draw each year excellent students from the other Universities of Canada, especially those of the West, but this side of the university life is in need of development. Many more fellowships should be founded, for in these days of small salaries for teachers, scholars and scientists, the promising youth must be attracted by such inducements to undertake the long post-graduate course of three years or more, which is necessary for those who are to enter upon a life of research or academic teaching. Also these fellowships if increased will bring to us numbers from the West who will be living links to bind Canada together. The new universities are an excellent field from which to draw graduate students who will gladly come to us if we can help them financially.

I wish to draw especial attention to the Appendix to this report dealing with

Scientific Research in the University. During the past session more interest has been taken in this essential function of a university than ever before, and there is good reason to believe that soon there will be a large development on this side of our work.

At the close of the session Professor R. M. MacIver withdrew from the position of Director of the Courses in Social Service, which he held for two years. Under him this department made a great advance, and the University owes much to him for the deep interest as well as the great attention which he has bestowed upon this work. I am confident that the work will be fully maintained under the direction of Professor J. A. Dale, who comes from McGill to undertake the direction of this department at the beginning of the academic year 1920-21.

The following benefactions were made to the University during the past year: The first payments of the gift of $500,000 made by Sir John and Lady Eaton for the Chair of Medicine; $10,000 through Mrs. Kilgour of Brandon, Man., to establish a scholarship in memory of the late Colonel John McCrae; $335,000 were subscribed by graduates and friends for the Alumni War Memorial Fund, as already mentioned; Sir Edmund Osler has again contributed $1,000 for special investigations in the Department of Pathology, and $1,000 for two graduate fellowships, and Colonel R. W. Leonard $500 for the same purpose; Sir Joseph Flavelle contributed $1,500 for a graduate fellowship in Oxford; T. M. Porter, Esq., of the University Schools gave $2,000 for scholarships in the University Schools; the late William Ramsay, Esq., $1,000 for a scholarship in the Department of Physics; the Canadian Oral Prophylactic Association $1,500 for Dental Research; a bequest from the estate of the late Dr. R. A. Reeve of $2,000; and the Imperial Oil Company made a grant of $1,000 for Research under Professor J. C. McLennan.

Three special Convocations were held during the year, the first of which was on August 26, 1919, when His Royal Highness the Prince of Wales was graciously pleased to accept the honorary degree of Doctor of Laws; the second on October 14th, 1919, when His Eminence Cardinal Mercier was given the same degree; and on Armistice Day, November 11th, a Military Convocation was held and degrees were conferred upon the following persons in recognition of their services during the war: Major-General Willoughby Garnons Gwatkin, Major-General John Taylor Fotheringham, Brigadier-General Charles Hamilton Mitchell, Professor John Cunningham McLennan, Major Thain Wendell MacDowell, V.C., and Matron-in-Chief Edith Catherine Rayside.

On December 9, 1919, Admiral Lord Jellicoe paid a brief visit to the University and spoke a few words to the students.

Ten Organ Recitals were given by F. A. Mouré, Esq., University Organist, covering the months from November to March inclusive. This series, which is the eighth, was much appreciated and was the most successful yet in point of attendance.

A course of six special lectures on "Some Features of the Prehistoric Period in the British Isles" was given by Sir Bertram Windle, F.R.S., F.S.A., LL.D., who has recently joined the staff of St. Michael's College. On December 12, 1919, Professor A. P. Newton of the University of London, lectured on "Graduate Facilities in the United Kingdom." The Saturday Afternoon Lecture Course was resumed with the following programme: Sir Andrew Macphail, M.D., on "Women in Democracy"; Yone Noguchi on "The Noh Play of Japan"; Professor J. C. McLennan, D.Sc., LL.D., on "Science and its Application to Marine Problems";

Professor John Macnaughton, LL.D., on "The River Gods"; Professor J. L. Morison, M.A., D.Litt., on "A Scottish Division in Sinai and Palestine"; Professor J. J. R. Macleod, M.B., Ch.B., on "The Principles of Ventilation"; and Senor Jose Pijoan on "Some Recent Advances in Archaeology."

All of which is respectfully submitted.

ROBERT A. FALCONER,
President

October 28th, 1920.

APPENDIX A

(1) Report of the Principal of University College.
(2) Report of the Dean of the Faculty of Medicine.
(3) Report of the Dean of the Faculty of Applied Science.
(4) Report of the Dean of the Faculty of Forestry.
(5) Report of the Dean of the Faculty of Education.
(6) Report of the Dean of the Faculty of Music.
(7) Report of the Librarian.
(8) Report on University Extension Work.
(9) Statement regarding the Biological Museum.
(10) Statement regarding the Geological Museum.
(11) Statement regarding the Palaeontological Museum.
(12) Statement regarding the Mineralogical Museum.
(13) Report of the Director of the Connaught Antitoxin Laboratories.
(14) Report of the Director of the Courses in Social Service.
(15) Report of the Physical Director.
(16) Report on Research.

(1) REPORT OF THE PRINCIPAL OF UNIVERSITY COLLEGE (PROFESSOR M. HUTTON).

The number of students—especially of men—has increased so rapidly with the return of peace that the College has again reached something like pre-war figures. Thus:

1909-1910	1,037
1910-1911	1,086
1911-1912	1,106
1912-1913	1,078
1913-1914	1,027
1918-1919	740
1919-1920	1,047

of whom 600 (roughly) are men (596 to 451 women), a number only exceeded in 1911-1912 and 1912-1913. The influx has inevitably accentuated the difficulties of space; the College lecture rooms are crowded while at the same time the demands upon them from the extraneous departments of the Registrar, Bursar and Superintendent for the same reason become more urgent.

The ultimate solution must be an Administration Building, but in the meantime much space could be gained for the College and some of its present space handed over to the extraneous departments by the addition of a north wing to the Quadrangle.

The increase of numbers has also accentuated the difficulties which attach to the supervision of the social side of college life; the side which bulks so largely in the University of Illinois and in other American Universities. Hart House as a university building is not under present arrangements, available for University College functions: but only the Great Hall of Hart House is large enough for a First Year reception when the first year numbers, as at present, 450 students roughly. The recourse to public halls outside the University, always regarded before as a passing concession to temporary conditions, has once more this year become an unwelcome necessity in connection with the first year's reception: the problem seems not less regrettable than insoluble; nor less insoluble than regrettable.

The figures of the registration of students for each year and their denominations follow:

Students registered in University College are as follows:

	Men.	Women.	Total.
First Year	284	160	444
Second Year	128	113	241
Third Year	94	104	198
Fourth Year	51	57	108
Occasionals	39	17	56
	596	451	1,047

Registration of students in University College as of January 15th, 1920, according to religious denominations is as follows:

Presbyterians	500
Church of England	232
Methodists	173
Baptists	43
Roman Catholic	38
Hebrews	40
Quakers	5
Congregationalists	5
Christian Scientists	3
Adventist	1
Plymouth Brethren	1
Evangelical Christian	2
Lutheran	3
New Thotist	1

The success of Hart House and its manifold attractions have inspired the alumnae and undergraduate women of University College to open a campaign for a similar building for women, to replace and expand the very limited accommodation offered at 85 St. George Street.

(2) Report of the Dean of the Faculty of Medicine (C. K. Clarke, M.D.)

The work of the past session has been unusually heavy owing to the fact that the classes have been greatly overcrowded, as was inevitable, when accommodation was provided for the many returned men.

Then again with the inauguration of the six-year course came new problems and unlooked-for difficulties.

The registration in the first year was so large (416) that for a time it looked as if it would not be possible to make provision for the students in the different laboratories. Room was found for the students in the primary classes, but it is by

no means certain that if the majority survive the ordeals of the primary years satisfactory provision for clinic instruction in the final years can be made. This is a practical question not to be forgotten, and it brings to the surface the agitation for higher admission standards and smaller classes. Just how this can be accomplished in a Provincial University offering State education is by no means clear, and yet it is only too apparent that the numbers entering Medicine are greater than the requirements of the country. Possibly the unusual conditions resulting from the war accounted for some of the congestion, but outside of the returned men, the registration was too large. It was prophesied that with the inauguration of the six years' course, with its demands for higher qualifications, the numbers would fall, but this did not happen.

The total registration in all years was 1,082. If these numbers keep up the University will find itself face to face with a difficult problem, both in regard to laboratory and hospital facilities.

The organization of Medicine on a new basis seems to have worked admirably and the teaching in this important department has been well done. In view of the high standards in teaching which have always characterized this department, this is eminently satisfactory.

I have found it necessary to tender my resignation as Dean of the Medical Faculty after twelve years' tenure of the office. Important work in connection with the Canadian National Committee for Mental Hygiene demands so much of my time that I cannot longer carry on the duties of the Deanship with satisfaction. It is with deep regret I forsake a task which has been congenial, and which has been made comparatively easy by the hearty co-operation of yourself and the members of the Faculty.

(3) Report of the Dean of the Faculty of Applied Science and Engineering (C. H. Mitchell, Esq., LL.D.)

The past year has been peculiarly unique in the history of this Faculty. Not only did staff and students enter upon the post-war period of academic revival with its many problems, but there returned to the several senior years a large number of overseas soldiers who had previously had their courses interrupted. In addition to these, the First Year registration, a total of 401, far exceeded previous record. At the opening of the Session, therefore, the Faculty was called upon to deal with a total attendance of 806 in all years, which was considerably over three times the number of the previous year, and on this account it was immediately found necessary to increase the staff by numerous appointments.

The new conditions of Applied Science education imposed by post-war tendencies and the new demands which, both during and before the war technical education was being called upon to fill, have been recognized as large factors in framing the policy to be followed by this Faculty. In common with all University work many phases of Applied Science education are in a transitional stage in this period of construction. The trend of such education has materially altered, and it may now be considered that it has entered upon an essentially industrial period. That this is already reflected in this University can be seen in the following table of registered attendance in the various departments:

Attendance by Departments, Year 1919-20

Department	I Year.	II Year.	III Year.	IV Year.	Total.
Civil Engineering	71	38	35	35	179
Mining Engineering	34	19	12	5	70
Mechanical Engineering	66	30	30	15	141
Architecture	15	3	10	3	31
Anal. Chemistry	.....	.....	15	4	19
Chemical Engineering	85	40	9	5	139
Electrical Engineering	125	39	26	25	215
Metallurgical Engineering	5	3	3	1	12
	401	172	140	93	806

Recognition of the tendencies and the probable demands of the country has during the year brought various temporary changes in curriculum, which it is expected will become fixed next year after further investigation and trial. Apart from those changes within departmental scope, there have been various additions with a view to broadening the nature of the engineering education not only to better fit graduates for entering wider fields of the engineering profession, but to provide them with that broader education so essential in all professions.

The crowded condition which these large numbers created in lecture rooms and laboratories has fully justified the new building which is now in course of erection for the Electrical Engineering and Applied Mechanics Departments, and it is hoped that this may be available for the coming year. But even with this the urgency will still exist for further accommodation in the next and succeeding years, for it is now evident that the academic year 1920-21 will find upwards of a thousand students registered in this Faculty with the prospect of still more in the following years.

In planning the arrangements for accommodating the attendance expected next year it has been necessary to provide for utilizing every available space and to rearrange time-tables in a radical manner. The space recently occupied by the Soldiers' Civil Re-establishment in the Mining Building will now become available, and the old Y.M.C.A. Building will again be required as during the past year. The large amount of space required for drafting has long been recognized as a difficulty in respect to accommodation, and steps have been taken to reduce the space per student by not only decreasing the allotted table space, but by rearranging time-tables and regrouping so that two students may in many cases use the same table at different periods of the day or week. In the process of regrouping it has been found necessary to divide the junior years into as many as four groups, not only for laboratory work but for lectures, and the time-table rearrangement for this involves the continuation of lectures in the afternoon and the introduction of laboratory work in the morning. Further space and time will be released by the arrangements to go into effect this summer for the field work of the Third Year to be carried out at the Summer Survey Camp at Gelert (fifty miles north-east of Toronto).

The foregoing arrangements for the accommodation for next year's expected attendance will, however, carry the process to the limits of desirable density, and in some cases beyond, even with the employment of the new Electrical Building. As the expectation for 1921-22 and the succeeding years is a still greater attendance in the Faculty, it is therefore strongly urged that still further accommodation be provided and that steps toward that end be taken in anticipation.

The academic feature of the past year has been the performance of the returned soldiers, who composed over fifty per cent. of the attendance in the four years. Their work throughout the year and the results of their examinations indicated that they have been able fully to revive their studious habits after the strenuous years at the war, and in this they have surpassed even the best expectations in their diligence and serious application. Of those of the whole student body in the Faculty who obtained honours in the recent examinations, the returned soldiers comprised 40 per cent. in the I Year, 44 per cent. in the II Year, 60 per cent. in the III Year, and 80 per cent. in the IV Year.

An interesting feature with respect to the composition and the character of the student body in this Faculty during the past year is the greatly increased age of the students in the several years. An analysis of ages shows that the approximate average age of the I Year in October, 1919, was 21.6 years; of the II Year, 22.2 years; of the III Year, 24 years; and of the IV Year, 25 years. It is obvious, of course, that these are largely due to the high proportions of returned soldiers and others whose University courses have been delayed or dislocated. Of the total of 772 undergraduates who wrote on the recent examinations, 394 were returned soldiers apportioned as follows:—I Year, total 376, of which 173 had been soldiers; II Year, total 164, with 82 soldiers; III Year, total 139, with 79 soldiers; and IV Year, total 93, with 60 soldiers.

The pressure of work on the staff and the desirability of broadening some of the departments has brought about the introduction of special lectures by gentlemen outside of the University who are engaged in professional practice. Among these were lectures on Civics and Town Planning by Mr. Thomas Adams, of the Commission of Conservation, Ottawa; on Landscape Architecture, by Mr. H. B. Dunnington Grubb; and on Architectural Subjects, by Messrs. John M. Lyle, W. A. Langton, and other leading architects. It is regretted that Mr. J. J. Traill, Assistant Professor of Hydraulics, is this year severing his connection with the University after fourteen years' service, to accept a post with the Hydro-Electric Commission of Ontario.

The activities of the School of Engineering Research within this Faculty have continued throughout the year despite the difficulties arising from the large attendance of students. The first number of the Bulletin was issued during the year, and given a very wide distribution, and it is gratifying to learn of its appreciation by the profession and the industrial community. Further work in research has been in progress, especially in Electrical and Applied Chemical subjects, and in Aerodynamics, wherein the newly installed wind tunnel has been of considerable value, as well as other of the aeronautical equipment.

It is particularly gratifying that the late Dean, Dr. W. H. Ellis, M.A., M.B., LL.D., remains with the Faculty as Professor Emeritus of Applied Chemistry, and that he is still available for counsel and advice.

(4) Report of the Acting Dean of the Faculty of Forestry (Dr. C. D. Howe).

During the year 1919-1920 forty-eight students have been in attendance in the Faculty of Forestry. Twenty of these were accredited to the First Year, fifteen to the Second Year, seven to the Third Year, and two to the Fourth Year. One student each in the Fifth and Sixth Years of the combined Forestry and Arts course and two occasional students make the total of forty-eight. The largest previous registration was fifty-one in the year 1914-1915, therefore the Faculty

has practically resumed its pre-war strength. Thirty-three of the forty-eight students in attendance during the year are returned soldiers, and fifteen of the latter have been previously enrolled in the Faculty.

Two men are to be graduated from the Four-Year Course and one from the Six-Year course. Two of them have been secured by the Dominion Forestry Branch and one by a pulp and paper company. Thirty-nine of the undergraduates are employed in summer work, eleven by the Dominion Forestry Branch, five by the Commission of Conservation, two by the Provincial Forestry Branch, one by the Dominion Entomological Branch, nineteen by pulp and paper or lumber companies, and one by a railway company in surveying work. In the past the chief source of employment has been Government service, but this summer one-half of the men are employed by private concerns, and in addition the five employed by the Commission of Conservation are engaged in work in which private companies co-operate. In fact, we have had more applications from such companies than we could fill. The increasing demand for our students by pulpwood and lumber companies would seem to indicate that the former prejudice against forestry ideas is giving way to the realization of the necessity for the husbanding of our forest resources.

It is the policy of the Faculty of Forestry each year to produce men better trained to meet the requirements of woodland owners, woods managers and owners of large forest industries—and this without foregoing any essential in training in the theory of forestry practice. A great advance in this direction will be accomplished during the coming year, it is hoped, through the acquirement of a forest tract to be used as an experiment station and practice ground for the School of Forestry, since through your interest and co-operation in the matter such an area has been practically assured us by the Provincial Government.

When the permanent practice camp is established we shall present for your consideration plans for short courses to be given practical woodsmen, fire rangers, timber scalers, and others whose work is in the forest, but who lack the necessary educational requirements for a university course in forestry. Hardly a week passes that we do not get inquiries from this class of men. As you know, a reorganization of the methods of handling the Provincial forests has been foreshadowed in the public utterances of several prominent Government officials, including the Prime Minister. When that time comes the Faculty of Forestry should be in a position to render service to the forest protective and administrative staff of the Provincial Government.

With the establishment of the permanent experimental area and practice camp, we shall also present for your consideration plans that we trust will lead to a wider field of usefulness and service for the School of Forestry. One of our graduates has recently accepted a position as Assistant Director of Forestry for New Zealand, and two others are at the present time considering offers of positions in the Colonial Service. There is a growing demand for Canadians in other portions of the Empire, and with an adequate equipment and staff there is no apparent reason why we could not train men successfully to fill forestry positions anywhere in the Empire. We should also attract men from other portions of the Empire to our School.

Our training of men would be more economical and efficient if the standard of material to work upon were raised through making Honour Matriculation the entrance requirements to the Faculty, and we make this a definite recommendation.

Provision should be made for men to specialize in certain phases of forestry work and in related problems. To this end we shall present to you plans for post-

graduate courses in such subjects as forest administration, forest mensuration, forest protection, forest ecology, forest entomology, forest fungology.

The importance of the forests and forest products in the economic life of the Province is practically without presentation to the public in the form of museum exhibits. Such exhibits give much space to the economic minerals, yet the forests have contributed four times more revenue to the Provincial Treasury since Confederation than have the mines. There probably has never been a time when an adequate exhibition of Ontario's forest products would have greater educational power than at present. Therefore, we shall bring plans to you for the establishment of a Forest Products Museum.

We wish to express our appreciation of your efforts to obtain better housing conditions and an adequate teaching staff for the Faculty of Forestry, and we shall live in the hope of their consummation when economic omens are more propitious.

You will be interested to know that the members of the Dominion Forestry Branch in Alberta, with whom George E. Bothwell worked, have established a Memorial Gold Medal, annually to be presented to the members of the Third-Year class who attain the highest proficiency in silviculture. We hope eventually to obtain such medals or appropriate memorials for each of the fifteen former members of the Faculty of Forestry who fell in the Great War.

(5) Report of the Dean of the Faculty of Education (Dr. Wm. Pakenham).

Twenty-five teachers attended the supplementary course for certificates as teachers of Household Science. This registration, added to the registration in the Summer Courses for teachers of Household Science and in the main Session for Specialists in Household Science, is evidence of a very lively interest in this relatively new department in the schools. It is not improbable that the expansion of the department will result soon in courses and certificates in Household Arts as distinguished from the courses and certificates in Household Science. Sewing and its allied arts make as large a demand on the Schools as foods and their allied sciences.

Never has the registration of men and women students in the Faculty of Education approached more nearly an equality than during this session. The presence of about one hundred veterans may explain this. It is not without significance that never have the interest and progress of the student body won more cordial approval from the instructors. The veterans have been good students, and will be good teachers.

The registration (77) of graduates in Arts in the High School Assistants' course begins again to rise. Before the war it reached one hundred. During the war, when men almost disappeared from the course, it sank below fifty. Having regard to the pressing needs of the High Schools, a registration of one hundred or more is much to be desired.

The registration in the courses in Education for the Master's degree in Arts and the Doctor's degree in Philosophy, in whole or part, and in the courses for degrees in Pedagogy, calls attention to the rapidly growing demand in Canada for advanced courses in professional education. This demand is now so varied and so strong that the University cannot afford longer to neglect it in the organization of the teaching staff and courses of instruction of the Faculty of Education. It must act immediately or American Universities will train the educational experts of Canada.

(6) Report of the Dean of the Faculty of Music (Dr. A. S. Vogt.)

The registration of students for the course leading to the degree of Bachelor of Music was as follows: First Year, 4; Second Year, 5; Third Year, 3; Occasional students, 8; total, 20.

The number of candidates applying for the Local Examinations during the year totalled 580. Of these 452 entered for examinations in piano playing; two in organ; thirty in singing; three in violin; and ninety-three in the Theory of Music. Successful candidates totalled 514.

A series of eighteen lectures was delivered by the members of the Faculty as follows:

Six by Healey Willan, Esq., Mus. Doc., entitled:

"The Principles of part-writing."
"Modulation."
"Harmonisation of Melodies."
"Chromatic Chords."
"Counterpoint in two and three parts (with special reference to the minor key)."
"Double Counterpoint and Canon."

Four by Albert Ham, Esq., Mus. Doc., F.R.C.O.:

"Latin Church Music by early English Composers."
"Some Adaptations of Plain-Song by Merbecke and Tallis."
"Anthems by English Composers of the 18th and 19th centuries."

Four by F. A. Mouré, Esq.:

"The Rise of Opera."
"Three Personalities:—Spontini, Meyerbeer, Berlioz." (2 lectures.)
"The Spanish and Russian Schools."

And four by H. A. Fricker, Esq., M.A., F.R.C.O., Mus. Bac.:

The Choral and Orchestral Compositions to be performed at the Mendelssohn Choir Concerts on February 23, 24 and 25.
The "St. Matthew Passion," J. S. Bach.

The special series of ten organ recitals given in Convocation Hall during the season by Mr. F. A. Mouré, University Organist, again proved a most important and attractive factor in the artistic life of the University.

(7) Report of the Librarian (H. H. Langton, Esq., M.A.).

I beg to submit the following report of the Library for the year ending June 30th, 1920:

Number of volumes added to the Library during the year 4040.

Number of pamphlets added to the Library during the year, 1,290.

Making total contents of the library 160,580 bound volumes and 52,646 pamphlets.

Statistics of the use of the Library by students, with comparisons of the two previous years, are as follows:

	1917-18.	1918-19.	1919-20.
No. of day books	21,203	26,698	41,128
No. of books taken out for the night	9,698	10,920	16,583
Average number of students at any one time	48	57	77

The increase in the number of students attending the University during the last period over the war period has resulted in a much larger use of the Library, as the foregoing statistics show. For the next few years it is probable that the reading-room accommodation will be sufficient, especially if it becomes possible to convert the large room underneath the present men's reading room into an open shelf reading room common to all readers, as was suggested a year ago. The needs of graduate students for separate reading-room accommodation has also been pressed upon the Library authorities. With the early removal of the University Press and the Students' Book Department from the quarters which they at present occupy in the Library Building, one or possibly both of the large rooms which they inhabit will be available for conversion to reading-room purposes, either for graduate or undergraduate students.

The completion of the metal shelving in the stack room, for which an appropriation was made last year, has been carried out, and the shifting of the books from the overcrowded sections will be undertaken during the summer months. This addition to the shelf-room will probably suffice for the next four or five years. As part of the new shelving, provision has been made on each story of the stack room for additional seating and desk accommodation for members of the Faculty working in the stack room.

The purchase and delivery of books and periodicals to the Library has fallen short of what was expected, chiefly in consequence of the inability of the Library correspondents in Germany to fill the orders which were sent them. Correspondence with a view to renewing relations was begun in July of last year, immediately after the proclamation of the Governor-General allowing communications with the former enemy countries, but, in spite of repeated letters and cablegrams, it has proved impossible up to the present to obtain the back volumes of scientific journals issued during the war years, and even current numbers of the same periodicals only began to arrive at the Library in the month of May.

It is a pleasure to be able to report the increasing number of endowment funds for Library purposes now on the hands of the University authorities. The John Squair French Library Fund was presented by Professor Squair in the year 1915, and purchases from the interest on this fund have been made during the past year for the Department of French. Another endowment for the same Department was made by Dr. A. Hamilton, of Richmond Hill, in memory of his son, to be called the Alexander Edwin Hamilton Library Fund. The interest on the endowment presented by Dr. Hamilton has accumulated since 1917, and purchases therefrom will henceforth be made in accordance with the terms of the gift.

In accordance with a resolution of the Library Committee of November 8th, 1916, an offer of all available duplicates to aid in the restoration of the Library of Louvain University was made to the Committee formed in England for that purpose. A complete list of our duplicates was sent this year to the Librarian of John Rylands Library of Manchester, who had been charged by the English Committee with the transmission of gifts, and about 1,200 volumes were selected by him. These volumes, together with a complete set of University of Toronto Studies, have been shipped to Manchester to be eventually sent to Louvain when the authorities of that University are ready to receive them. Appeals for duplicates have also been received this year from Laval University Medical School and from the University of King's College, Windsor, N.S., which suffered losses from fire. Lists are in preparation and donations will soon follow.

(8) Report of the Secretary of the Committee on University Extension (Dr. A. H. Abbott).

The total enrolment in the courses offered by this Department during the Session 1919-1920 was 167; course leading to the degree of B.A., 70; Correspondence courses preparatory to the Summer Session under the Department of Education, 43; Tutorial Classes, 54. The course leading to the degree of B.A. was made up as follows:

Teachers' Classes 1919-1920 (41 regular, 3 occasional)	44	
Summer Session 1919 (15 Teachers' Classes, 7 occasional)	35	
Correspondence Courses 1919-1920 (16 Summer Session, 6 new)	22	
Total		101
Appearing twice		31
		70

The Teachers' Classes were held as usual throughout the regular session, with an increase of attendance over last year of fifteen. The subjects offered were: Second Year, English, French, Physics; Third Year, English, Political Economy, Chemistry. Thirty-six students wrote on the Spring Examinations, taking in all ninety subjects, with the following standing: 14 Class A, 39 Class B, 28 Class C, 9 stars.

The Summer Session was held from July 8th to August 8th, with lectures from 8—1 daily for six days a week. The following subjects were offered: II, Latin, History, Biology; III, Latin, French, Ancient History, Modern History, Chemistry —the last subject being given upon request of the Teachers' Classes. The attendance was thirty-five, of whom 15 were members of the winter class. Arrangements were made for the accommodation of out-of-town students in Argyle House. Twenty-six students wrote on the September Examinations, taking in all sixty-two subjects, with the following standing: 4 Class A, 36 Class B, 20 Class C, 3 stars.

The Correspondence Courses have been carried throughout the year in the Arts Course preparatory to the Summer Session and in the subjects of Normal Entrance, Faculty Entrance and Commerce preparatory to the Summer Session conducted by the Department of Education. 1,158 bulletins were issued; 598 exercises and essays were received, varying in length from 5—20 pages each. The enrolment was as follows: Arts 22, Normal Entrance 8, Faculty Entrance 29, Commerce 6, total 65.

Two students who have been following the Teachers' Course since the summer of 1916 graduated this spring; one attended in regular session as recommended, for the work of the IV Year; the other, upon completion of the III Year, was granted the IV Year for military service. Two others attended for IV Year work, but had two stars in examination.

To bring the Teachers' Course into harmony with the new Pass Course, the following prescription was agreed upon for the II, III and IV Years:

English.
French.
A Science.
Two of History, Psychology, Political Economy.

Local Lectures.

Lectures were delivered in the following centres: Aurora, Brinston, Guelph, Hamilton, Lansing, North Bay, Peterborough, Seaforth, Smithville.

Tutorial Classes.

Tutorial Classes were arranged in Toronto for men and women engaged in business or teaching who wished to follow a directed course of study in the evening. Three classes were given, two in English and one in Political Economy, with a total enrolment of fifty-four.

(9) Statement Regarding the Biological Museum (Professor B. A. Bensley).

The following donations have been received by the University Biological Museum and by the Royal Ontario Museum of Zoology:

Mounted specimens of Atlantic fishes and a marine turtle from Mr. W. H. Brouse, Toronto.

A European duck hawk from Mr. A. Rose, Toronto.

A valuable collection of deer antlers and other specimens, the property of the late Mr. W. R. Patton, of Toronto, and presented by Miss A. L. Carlyle.

Several specimens of wild geese and partridge from Mr. G. H. Corsan, University of Toronto.

An egg of an extinct ostrich (second specimen) from Rev. Harold M. Clark, Wuan, Honan, China. The specimen has been presented to the British Museum, London.

A collection of mounted birds from Mr. W. F. Coutts, Toronto.

An Atlantic sturgeon and case, presented by the Board of Trade of the City of Toronto.

A mounted apteryx and a ground parrot, from Mrs. John Lewis, Toronto.

A hawk presented by Mr. J. A. Harvey, Swansea.

Many specimens of larger mammals and birds, including some important additions to the collections, have been received from the Riverdale Zoological Gardens.

(10) Statement Regarding the Geological Museum (Professor A. P. Coleman).

The chief expansion of this museum during the year has been the addition of two new cases to the series and the erection of a facsimile of the Niagara escarpment at Grimsby on a scale of one-half inch to the foot. In addition there has been the usual gradual growth as indicated by the list of acquisitions below:—

By Donation:

Zinc ore, Federal mines, Gaspe.—J. C. Biedelman, Esq., Montreal.

Zinc ore, Waco, Missouri.—J. C. Biedelman, Esq.

Graphite, Waltham, Quebec.—J. C. Biedelman, Esq.

Epsomite and ground products, Basque, B.C.—R. Pinchin, Esq., Toronto.

Gold ore, King George V Mineral Claim, B.C.—John Smallwood, Esq., Nelson, B.C.

Cretaceous clay from Matagami River, Ontario, and briquettes of same.—J. Keele, Esq., Ottawa, Ontario.

Hydromagnesite, Atlin, B.C.—Gold Commissioner, Atlin, B.C.

Collection of rocks and minerals.—Heirs of Colonel C. C. Grant, Hamilton, Ontario.

Edition de luxe and folios, Tokyo, Geographical Soc.—Sir Edmund Walker.

By Collection:

Material from Grimsby for construction of facsimile of Niagara escarpment.—Professor Parks.

By Purchase:

Rocks and minerals.—Estate of Henry Montgomery, Esq.
Zinc ores.—Franklin Furnace, N.J.
Polished slabs of decorative stones.
Economic ores and minerals.

(11) Statement Regarding the Palaeontology Museum (Professor B. A. Bensley).

During the year the large dinosaur collected in Alberta in 1918 was finally prepared and mounted in the gallery. The specimen ranks among the best ever obtained and is the type of a new species. The formal acceptance of this fine addition to the museum by the Chairman of the Board of Trustees was made the occasion of a public meeting on the evening of May 10, 1920.

Some work has been done on the material collected in 1919, more particularly on a fine head of *Monoclonius*. The large collection obtained from the heirs of Colonel C. C. Grant has been arranged and much material from the local rocks at Toronto has been added to the collections.

The more important acquisitions during the year are:—

By Donation:

Orthoceras from China.—Rev. Harold Clark.
Echinoid from Maidenhead, England.—Professor Currelly.
Large collection of fossils and books.—Heirs of Colonel C. C. Grant, Hamilton, Ontario.
Mastodon bones.—Miss M. I. Stewart, St. Catharines, Ontario.
Fossil tree-trunk from Arizona.

By Exchange:

Devonian Fossil Fish.—Buffalo Society of Natural Sciences.

By Collection:

Five skeletons of dinosaurs, more or less complete. Belly River Formation of Alberta.—Professor Parks.
Gryphaea from New Mexico.—Professor Coleman.
Local Fossils from Toronto.—Professor Parks and students.

By Purchase:

Miscellaneous fossils to fill gaps in the series.—Ward's Natural Science Establishment, Rochester, N.Y.
Miscellaneous fossils and books.—Estate of Henry Montgomery, Toronto.

(12) Statement Regarding the Mineralogical Museum (Professor T. L. Walker).

The collections of the University and of the Royal Ontario Museum of Mineralogy have been enlarged during the year by donations and exchange.

The following lists contain the names of our chief benefactors:—

By Exchange:

Roebling, Colonel W. A., Trenton, N.J.
McIntosh, Professor D. S., Halifax, N.S.
Gregory & Co., London, England.
Ward's Natural Science Establishment, Rochester, N.Y.
Cahn, Lazard, Colorado Springs, Colo.

By Donation:

Bateman, G. C., Cobalt, Ont.
Broderick, T. M., Minneapolis.
Burrows, A. G., Toronto, Ont.
Brooks, Reginald, Atlin, B.C.
Corwin, T. J., Merritt, B.C.
Cartwright, C. E., Vancouver, B.C.
Dickie, C. H., Duncan, B.C.
Daulton, T. M., Atlin, B.C.
Ford, Professor W. E., New Haven, Conn.
Ferrier, Dr. W. F., Toronto, Ont.
Geological Survey of India, Calcutta.
Gibbs, F. N., Port Arthur, Ont.
Gordon, S. G., Philadelphia, Pa.
Haultain, Professor H. E. T., Toronto, Ont.
Hall, G. B., Winnipeg, Man.
Horn Silver Mine, Similkameen, B.C.
International Nickel Company, Toronto, Ont.
Johnston, R. A. A., Ottawa, Ont.
King, J. T., Toronto, Ont.
Knight, C. W., Toronto, Ont.
Kee, H. A., Cobalt, Ont.
Kennedy, H. A. G., Cobalt, Ont.
Lacroix, Professor A., Paris, France.
Miller, W. G., Toronto, Ont.
Miles, A. D., Toronto, Ont.
Myfflin, Rollo, Salmo, B.C.
Sime, W. C., Whitehorse, Y.T.
Sands, C. M., Discovery, Atlin, B.C.
Smeeth, Dr. W. E., Bangalore, India.
Starkey, F. A., Nelson, B.C.
Taylor Engineering Company, Vancouver, B.C.
Tyrell, J. B., Toronto, Ont.
Watkin-Brown, W. T., Sydney, N.S.W.
Warford, H. A., Philadelphia, Pa.
Wigglesworth, Dr. E., Boston, Mass.

(13) Report of the Director of the Connaught Antitoxin Laboratories (Professor J. G. Fitzgerald).

The year 1919-1920 has been an exceptionally active one in both the Antitoxin and Research Divisions of the Connaught Antitoxin Laboratories.

The production of sera, antitoxins, and vaccines for the Department of Militia and Defence, had been completed but a very few months, when an epidemic outbreak of smallpox occurred in Ontario, chiefly in the City of Toronto. There was, as a result, an enormous demand for smallpox vaccine and the resources of the Laboratories were greatly strained to meet the need. The output of vaccine for each of the months during which the epidemic continued, was almost as great as the production for any previous year since the opening of the Laboratories. Sufficient vaccine for 489,270 vaccinations was distributed during October, November, December and January. The Laboratories were highly commended by the Chief Officer of Health of Ontario in being able to immediately cope with the unprecedented demand for vaccine which characterized the first few weeks of the epidemic. The experience of the Laboratories indicates clearly that on the occasion of an outbreak of smallpox the majority of the people in the community are familiar with, and have faith in. the only effective weapon we possess at present for the control of smallpox.

In connection with the quality of the vaccine the following appeared in the *Evening Telegram,* Toronto, December 18, 1919: "While I have unbounded faith in the Connaught Laboratories, said the Medical Officer of Health (Dr. C. J. Hastings) where the vaccine is manufactured, I have had the tubes of vaccine opened, placed culture plates and put in the incubator. In every instance the vaccine has been found absolutely pure."

During the visit of H.R.H. The Prince of Wales, to the University in August, 1919, the following reference was made to the work of the Laboratories, "But that was not the only way in which the University rendered service to the Empire during the war. A magnificent Antitoxin Laboratory was established, the greatest that was equipped anywhere, and was operated by this University for the benefit of the Allies."

Not only have all the Canadian Provinces been furnished, in part, or in whole with their requirements of Public Health Biological Products during 1919-1920, but the Colony of Newfoundland has also been supplied and in addition a number of the Islands in the British West Indies have obtained from these Laboratories certain antitoxins. Late in the fall of 1919 for the first time antitoxins and sera were shipped to New Zealand for use in that Dominion.

This widening of the sphere of usefulness of the Antitoxin Division of the Laboratories, has been a source of great satisfaction to those responsible for the work.

In April, 1920, a license was obtained from the Treasury Department of the United States, for the exportation into that country, and sale in interstate commerce there, of diphtheria and tetanus antitoxin prepared in the Connaught Antitoxin Laboratories. Before such a license was granted rigid requirements were demanded in the methods used in the preparation of antitoxins, and most searching investigations of all phases of the Laboratories' work undertaken by Officers of the United States Public Health Service. The satisfactory result of this examination of the Laboratories is a source of especial pleasure to the members of the staff responsible for various phases of the work.

The great increase in the total output of diphtheria antitoxin by the Laboratories, is seen in the following totals indicating the output in units for the several years:—

1916.	1917.	1918.	1919.
Units.	Units.	Units.	Units.
218,626,000	304,576,000	275,015,000	375,215,000

The total volumes of diphtheria plasma concentrated in 1917, 1918, and 1919, was 1,425, 1,718, and 2,263 litres, respectively.

The products being produced and distributed at the present time include: diphtheria and tetanus antitoxin, anti-meningitis serum, type I anti-pneumococcus serum, normal horse serum, smallpox vaccine, anti-rabies vaccine (Pasteur Treatment) and anti-typhoid vaccine.

The Research Division of the Laboratories is now almost completely organized.

During the year Mr. P. J. Moloney, M.A., was appointed to the position of Research Chemist in this Division, and has since his appointment, been carrying on fundamental work in the investigation of some of the physico-chemical factors of toxin production by bacteria.

The work of the Research Division for the Department of Soldiers' Civil Re-establishment has been continued by Dr. A. H. Caulfeild, and his colleagues Dr. Ray Hodge, and Dr. D. T. Fraser, and by Dr. H. C. Cruikshank; all of these members of the Department are engaged in research work.

Dr. Defries and Miss Hanna have been engaged in a study of certain interesting points regarding the viability of vaccine virus and the effect of various physical and chemical agents thereon. The Director of the Laboratories has been concerned with the collection and analysis of certain data bearing on deaths from certain of the communicable diseases occurring in the Province of Ontario.

The Connaught Antitoxin Laboratories Research Fund, the income on which is used for the support of work carried on in this Division, has been considerably augmented during the current year.

A very successful meeting of the Honorary Advisory Committee of the Laboratories was held during the year.

The Director of the Laboratories has been appointed by the Governor-General-in-Council, a member of the recently established Dominion Council of Health, the advisory body to the Federal Department of Health, Canada.

The continued hearty co-operation of the members of the staff of the Connaught Antitoxin Laboratories is gratefully acknowledged.

(14) Report of the Acting Director of the Department of Social Service (Professor R. M. MacIver).

There was a very large increase in the number of students, particularly full-time students, as compared with any previous year, there being for the regular session an enrolment of 51 full-time and 304 part-time students. This is exclusive of those attending short-period courses of lectures.

Certain developments were made in the organization of the Department. It was found advisable to divide the work of the Department into a number of sections, each student on entering being required to state a preference for one of these so as to allow for more intensive work in his or her course. The sections are as follows: A. Community Organization; B. Child Welfare: C. Settlement Work; D. Industrial Investigation: E. Mental Hygiene; F. Medical Social Work.

and a series of courses was laid out accordingly. This arrangement has worked very well.

In carrying out this development certain additions were made to the staff of the Department, as follows:—

Dr. Eric Clarke was appointed lecturer in psychiatry.

Mr. Norman Leonard Burnette was appointed lecturer in occupational therapy.

Miss Hodgkins was appointed lecturer in recreation, and Miss Kathleen Russell was appointed as supervisor of the students taking the medical social service course.

The increase of full-time students meant a considerable extension of the field work organization, which was superintended by Miss Agnes C. McGregor as Director of Field Work.

No second year course was given during the past session, owing to the small registration. But a fair number of this year's students have enrolled for a two years' course, and this will therefore be in full operation in the coming year.

The plan followed in the previous year of inviting well-known authorities to give special lectures on various branches of social service work was continued. These lectures were held in the Physics Building and attracted large audiences.

With the co-operation of the National Committee for Mental Hygiene a special two months' course in mental hygiene social work, intended for those who had already graduated as nurses or social workers, was put on, and was attended by 23 students. The courses of lectures for voluntary workers were arranged during the year, one at the request of the Big Sisters' Association, there being an enrolment of 29 members, the other at the request of the Neighbourhood Workers' Association, there being an enrolment for this course of 112 members, representing 42 different social agencies.

In relinquishing the post of acting director I desire to record my conviction of the growing value of the Department in training students and setting standards for social work throughout Canada. That this service is appreciated is evidenced by the demand for the graduates of the Department which now comes from all over the country. I desire also to express my indebtedness to the staff and lecturers of the Department for their ungrudging and enthusiastic co-operation, and to the various social agencies of the city for their invaluable aid in providing facilities for the training of the students in practical work.

(15) Report of the Physical Director (Dr. J. W. Barton).

The Academic Year 1919-20 will be memorable for the revival of Intercollegiate Athletics after an interregnum of four years of war. It was inevitable that the year should be one of reorganization, and, to a certain extent, experiment. The loss of so many of our finest athletes during the war, the majority of whom would have been the senior men to carry on Varsity traditions from year to year, meant that new conditions would have to be faced. It meant that a whole generation of University life had come and gone since athletics were suspended at the close of the session of 1914-15. Taking all these facts into consideration, the results of this year can be looked upon with satisfaction and great encouragement for the years to come.

This year marked the beginning of compulsory physical examination and physical training, and the results surpassed even our expectations. Also it brought to light the most interesting fact that 75 per cent. of our students are in Category

"A." that is, physically fit men, 13 per cent. are "B" men, and 10 per cent. "C" men, leaving 2 per cent. as temporarily or permanently unfit.

The compulsory physical training of the 1st and 2nd years worked out very satisfactorily, as the students in Category "A" were allowed to choose their form of exercises or athletics. Students in Category "B" were allowed to choose within certain limits and students in Category "C" took the form of exercise prescribed for them by the Physical Director.

The arrangement of our gymnasia, with special rooms for boxing, wrestling, fencing, basket and base-ball, and the large gymnasium for class and apparatus work is unique and proved adequate for the unusual demands made upon our space. The University of Toronto is the only University to my knowledge with this excellent arrangement. Our swimming pool is now the finest in Canada and, although we have an unusually strong swimming team, which was fortunate enough to win the Inter-collegiate Championship, nevertheless Mr. Winterburn, our Swimming Instructor, placed particular emphasis on teaching beginners to swim. One hundred and seventy-six students were taught to swim. The work of the Gymnasium Instructors, Messrs. D. M. Barton and F. H. Blake, was of very high order, and we are fortunate indeed in having such experienced men.

Interfaculty contests were the largest in our history. While we are very anxious to win Intercollegiate contests, the real value of our work is in the large number of students that are engaging in inter-faculty competition. The Mulock Cup was again competed for, for the twenty-sixth year in succession. Sixteen teams were entered, and nearly 400 players took part, the group winners being O. A. C., Junior Meds., Junior Dents., and Trinity. Junior Meds. won the cup by decisively defeating O. A. C.

The Track Meet was the largest ever held in the history of University athletics, there being close upon 200 entries in the Track and Field events and 100 men taking part in the Push-ball contest. The competitors were well distributed through the Faculties, and several long-standing records were broken. S. P. S. took first place with 31 points, and Meds. second place with 27. K. L. Carruthers, Applied Science, beat the record for the 120 yards hurdle (established in 1909 by L. A. Wright) by 3/5 seconds, getting a new record of 16 3/5 seconds.

R. S. Foster, Vets., made a new record for throwing the discus of 112 ft. 9 in.

In the basketball competition for the Sifton Cup, no less than eighteen teams were entered, comprising over 250 players. Senior Meds. won the championship by defeating Victoria.

In Interfaculty hockey for the Jennings Cup eighteen teams were also entered, Junior Meds. winning the championship by defeating Victoria, the runners-up. Nearly 300 men participated in this series.

There were about 300 students engaged in the boxing, fencing and wrestling and 76 entered the Senior competition, which was the largest in University history.

We were unusually successful in our Intercollegiate contests. In rugby, McGill won the Senior Intercollegiate Championship; Varsity the Intermediate, and O. A. C., the Junior.

The Track Meet should have come to Toronto this year, but, in deference to McGill's wishes, it was held in Montreal to mark the opening of the new Molson Stadium. McGill won the championship by making a clean sweep of the track events, although Varsity and Queen's were easily the best in the field events.

The harrier meet was held in Montreal and was won by McGill by the close score of 25 to 23.

Varsity won the Intercollegiate Championship in soccer, tennis, senior hockey, junior hockey, basketball, boxing, fencing and wrestling, and swimming, that is, Varsity won six out of ten senior contests. March sixth was the biggest day in our Intercollegiate history. The Senior Hockey and Basketball teams defeated McGill at Ottawa, the Boxing, Wrestling Club defeated Queen's and McGill at Kingston and our Junior Hockey Team defeated Queen's at Trenton. The intermediate hockey was won by R. M. C. and the water polo by McGill. Varsity, by winning the senior hockey, represented the Intercollegiate in the contest for the Allan Cup, defeating the Quebec champions in the preliminaries, the O. H. A. champions in the semi-finals, and were beaten in the finals by the Falcons of Winnipeg.

(16) Research in Scientific Departments.

For a number of years Research has been conducted in the University, apart from that carried on by individual members of the staff, through Special Funds. In the year 1912-13 a Medical Research fund was established through private gifts which over five years amounted to nearly $50,000, and a large amount of valuable investigation bearing mainly on clinical medicine was conducted especially by younger members of the staff. Also through munificent annual gifts from Sir Edmund Osler it has been possible to conduct special investigations in Pathology.

One purpose of the erection of the Connaught Antitoxin Laboratories in 1917 through the generosity of Colonel A. E. Gooderham was the development of research into problems of Hygiene, Preventive Medicine and Public Health, especially to provide means whereby "the incidence of and mortality from communicable diseases may be lessened." With this end the proceeds, arising out of the manufacture of sera and antitoxin, have been placed in a Special Research Fund which now amounts to $100,000. In addition the Provincial Government has voted $3,750 a year for ten years to be spent also in research into these problems. The chief investigations in this Department have dealt with influenza and army cases of tubercular disease.

In 1916-17 a Special Fund of $15,000 was established by the Board of Governors, part of which was devoted to investigations in Medicine chiefly arising out of physiological and pathological conditions connected with the functional re-education of returned soldiers in Hart House; and the rest was set aside for a School of Engineering Research in the Faculty of Applied Science, which had as its object partly the training of men for research and partly actual investigation into problems of Engineering and Applied Chemistry.

Further, in the year 1919, again through the generosity of Colonel A. E. Gooderham, a finely equipped laboratory was placed at the disposal of the University for the purpose of conducting investigations in the process of fermentation, and Mr. H. B. Speakman was made director of the laboratory.

A great step in advance was taken in the last academic session, owing mainly to the efforts of the Royal Canadian Institute through the leadership of Professor J. C. Fields, F.R.S., when public attention was called to the necessity of research on a large scale both in the Universities and the industries, and the Government approved an addition by the Governors of $60,000 to the estimates for purposes

of scientific research. This has been distributed after conference with a special research committee to best meet the needs and opportunities of the different departments.

Physics, Under Direction of Professor J. C. McLennan, F.R.S.

1. *Helium.*—Its production and purification, its use as a material suitable for employment in the construction of electric lamps. Progress was also made in an investigation looking towards its liquefaction for the purpose of studying the properties of bodies at extremely low temperatures.

2. *Spectroscopy.*—In this field the spectra of various elements have been extended down into the extreme ultraviolet.

Also a beginning was made in working out the series spectra of lead, tin, and thallium from absorption phenomena; also two spectographs were devised and constructed for work in the extreme ultraviolet region.

3. *Ionisation Phenomena.*—In this field progress was made in determining the manner in which ionisation occurs in the vapours of Hydrogen and Helium.

4. *Piezo-electric phenomena.*—In this direction an investigation was carried through on the measurement of pressures generated by the explosions of mixtures of various kinds of gases.

5. *Diffusion Phenomena.*—In this line of investigation the rate of transfusion of Hydrogen and of Helium through various types of balloon fabrics and thin water films has been determined.

6. *Mobilities of ions.*—Here a determination of the mobilities of ions produced in Helium at exceedingly high pressure of alpha rays was effected.

7. *Properties of fused mixtures of mica and various elements.*—This investigation was a continuation of one begun under Dr. McLennan in the Admiralty and it has been shown that it is possible to make a mixture, by fusing mica, copper, and other elements, which has an exceedingly high temperature coefficient of resistance. This will no doubt lead to the use of this material as a means of protection against fire. There are also other directions in which this discovery will have application.

8. *Colloidal Solutions.*—In this field, which is followed up chiefly by Professor Burton, very considerable progress has been made in working out the properties of colloidal solutions.

9. *Practical Mechanics.*—In this field, which has been worked at especially by Dr. Satterly, progress has been made in working out methods for the elucidation of problems of impact, harmonic motion and elasticity, on the use of planimeters and in the practical study of the catenary.

For papers see Appendix E, "Publications."

A paper is being prepared by Mr. H. R. Foreman on his Piezo-electric studies on Explosion Pressures. This represents the work carried through by him.

Geological Research Carried Out in 1919 by Professor A. P. Coleman, F.R.S.

Part of June, the whole of July and August and part of September, 1919, was devoted to a study of the Pleistocene Geology and Physiography of the Gaspé Peninsula. A region previously unmapped was explored and a sketch map prepared, showing mountains several hundred feet higher than had formerly been reported on the Shickshock range. Many observations were made as to glacial

geology, soils, old beaches, etc. A paper has been published on the results—"Extent and Thickness of the Labrador Ice Sheet"—as a Bulletin of the Geological Society of America; and a general report on Gaspé is to be published soon by the Geological Survey of Canada, as the result of the work of the summer of 1919 and also of the previous summer.

The amount of the grant for 1919 was $600, all of which was expended in travel or necessary aid in working out the results of the exploration.

Palaeontology, Under Direction of Professor W. A. Parks.

(A) Collections have been made at various points on the Humber and Don Rivers, from the Etobicoke, Weston, the prison farm, and points on the Rouge River. These collections have been of great use in the preparation of a report now being published by the Bureau of Mines of Ontario dealing with the fossil Pelecypoda of our rocks; they will also serve for forthcoming reports of a like nature on the other classes of organisms. Another result is the discovery of hitherto unrecorded exposures of Utica shales on the Rouge River with some very rare fossils which I am now figuring for publication.

(B) Part of the grant was used for the financing of an expedition to the Red Deer River, Alberta.

The expedition was very successful and yielded the following results:—

(1) Complete head and most of the skeleton of a new genus and species of crested trachodont dinosaur. The head with crest measures six feet five inches in length and is of a very different type from anything previously discovered. This specimen will serve as material for an important investigation with resultant publication, and, in my opinion, is alone a thorough justification for the grant.

(2) Two small trachodont dinosaurs without heads. These may or may not prove to be new species.

(3) One skull allied to Corythosaurus, possibly a new species.

(4) One skull, probably Stephanosaurus.

(5) One side with head of a plated dinosaur. Any fragments of this type of dinosaur are of great value and in all probability the find will prove of great interest to science.

Mineralogy, Under Direction of Professor T. L. Walker.

The money provided for the Department was spent for the following purposes:

1. The engagement of a Research Assistant to take some of the elementary routine work in the Department so as to secure more time for research for the regular members of the staff.

2. Purchase of apparatus to enable us to take up investigations in the examination of opaque minerals in reflected light. This apparatus was received in May. Mr. Thomson, lecturer in this Department, has been encouraged to prepare himself to conduct such investigations.

3. Employment of a chemist to assist in the chemical analysis of minerals. This was not very satisfactory as it was difficult to secure a suitably trained man on such short notice.

As a result of the freedom allowed by the assistance obtained in this way the members of the staff were able to complete and prepare for publication the following papers:—

Professor Parsons:

1. Thunder Bay—Kenora Line and Lakes Kashaweogama and St. Joseph—Ontario Bureau of Mines.

2. Calculation in the Triclinic System, illustrated by Anorthite from Vesuvius—*American Mineralogist.*

Mr. Thomson (with V. Goldschmidt):

Phosgenite from Tsumeb, Ambo-Land. South-west Africa—*American Mineralogist.*

Dr. Walker:

1. Bornite from Usk, B.C.—*American Mineralogist.*

2. Allemontite from Atlin, B.C.—*American Mineralogist.*

3. Skutterudite from Cobalt, Ont.—*American Mineralogist.*

In addition to the above, Mr. T. L. Gledhill, the Research Assistant, conducted some investigations as to the nature of the Black Sands from the Atlin gold fields. His results were embodied in a thesis submitted for the master's degree.

Greater advantage would be obtained from this fund if the appropriations were announced earlier. This year two suitable assistants were tentatively engaged by me, but as the summer advanced I was obliged to release them in the middle of August to take up appointments in American Universities.

The particular field for members of our staff is the advancement of our knowledge of Canadian mineral resources. This means the investigation of new or complex material and the recording of the results in mineralogical publications where they will be easily accessible to all interested. In the future a grant for purposes of publication would be very desirable.

Chemistry Under Direction of Professor W. Lash Miller.

Of last year's grant for research in Chemistry, $2,000 was expended in salaries, and the remainder, about $4,000, on apparatus. The greater part of the apparatus money went towards building a 200 kilo-watt transformer and regulators so that the alternating current of the Hydro-Electric might be available for electric furnace work; part was used to provide apparatus for the use of Professor Ferguson during the present winter; and a little was spent on apparatus and material for the research work under way.

Owing to the unexpectedly large undergraduate enrolment in the faculties of Medicine and Applied Science, and to the impossibility of obtaining assistants in any other way, the offer of Mr. T. C. McMullen (who came with a research bursary from the Hon. Adv. Council) to give up his bursary, was accepted. Mr. M. E. Smith and Mr. N. A. Clark (originally appointed half-time assistants) relinquished their claim to free time for research; and all three worked as full-time assistants with the undergraduate classes. Although their days were fully occupied with teaching, all three came to the laboratory at night, and made a good beginning at research work which they are now continuing under more favourable conditions. Mr. W. A. Lawrance, with a bursary from the Hon. Adv. Council, was the only full-time research student in the Department.

In spite of these circumstances, a good deal of work was accomplished. Five papers were published in the scientific journals, giving the results of experimental research, viz.:

W. H. Martin: "The scattering of light by dust-free liquids;" Jour. Phys. Chem. XX, 24, 478, June, 1920. The experimental results recorded in this paper are a continuation of work begun in 1912 by Mr. W. J. Fawcett and Mr. W. H. Martin under the direction of Professor Kenrick, and published Trans. Roy. Soc. Canada, 1913; the experiments are being continued by Mr. Martin and Mr. Lehrman during the present winter.

W. A. Lawrance: "Friedel and Crafts' Reaction—nitro-phthalic anhydrides and acetylamino-phthalic anhydrides with benzene and aluminium chloride;" Jour. Am. Chem. Soc. 42, 1871, September, 1920. This is the second of a series of papers on Friedel and Crafts' Reaction, containing the results of experimental work done under Professor Allan's direction; the first: "Friedel and Crafts' Reaction—the preparation of orthobenzoyl-benzoic acid and benzophenone," by C. R. Rubidge and N. C. Qua, was published in the same journal in 1914. Messrs. Smith, McMullen, Stephens and Lorriman are at present engaged in further research on the same reaction.

J. McKelleher: "Some phenomena observed in electric furnace arcs;" Trans. Am. Electrochem. Soc. 38, September, 1920. The experiments with direct current furnaces here described will be continued this winter with alternating current, when the transformer now being installed is in working order; in this work Mr. McKelleher will be assisted by Mr. Westman.

W. Lash Miller: "Toxicity and Chemical Potential;" Jour. Phys. Chem. 24, 562, October, 1920.

J. S. Lemon: "The toxicity towards anthrax and staphylococcus of solutions containing phenol and sodium chloride;" Jour. Phys. Chem. 24, 570, October, 1920. These two papers are the first of a series giving the results of Physico-chemical experiments on the behaviour of anthrax staphylococcus and yeast towards various poisons; other members of the series have been accepted for publication and will appear this winter. At present Messrs. Clark, Lucas, Leaf, Eldon and Miss Roberts are continuing the experimental work.

In addition to these publications an account of the work of Messrs. McMullen and Smith was read before the May meeting of the Roy. Soc. Canada, by Professor Allan; that of Mr. A. L. Marshall was embodied in a thesis which was accepted for the 1851 Science Research Scholarship and Mr. W. R. Fetzer's work on the determination of sulphur in complex mixtures was sent to the Mellon Institute for comparison with results obtained in the laboratories there.

Biology Under Direction of Professor B. A. Bensley.

Owing to the teaching demands which the staff had to meet last year the Department requested only a small appropriation out of the Research Fund, amounting in all to $300. Certain work of an experimental nature bearing on the fundamental nature of living matter was then in progress, for which apparatus and chemicals not previously in the possession of the Department were obtained, Professor Coventry was able to put forward his research on experimental modiciation of growth, utilizing fishes and amphibians for the purpose. Material is available only in the spring and consequently this work is held over as regards its completion until the early part of next year. Mr. J. W. MacArthur completed a piece of work of some scientific importance on the reaction of lower organisms to chemical stimuli the results of which have been incorporated in a paper to the Journal of General Physiology.

(1) We are going ahead with our plan for the organization of a fisheries laboratory, using the research fund as a basis. We should state, however, that we hope for support from the Government of a project which bears on the aquatic resources of the province and that a permanent organization would demand some formal and separate arrangement for its support.

(2) Research having relation to agriculture, but of a higher scientific order, is practically non-existent in the University proper. We shall have lost a rare opportunity if we fail to organize Bacteriology and Zymology on a broad foundation, to establish Genetics or Scientific Breeding on both plant and animal sides, and re-direct some of the research in Chemistry and Biochemistry along lines supportive of agriculture.

Botany Under Direction of Professor J. H. Faull.

The special appropriation for research granted to the Department of Botany was expended in aids to individual investigators and on apparatus and supplies as follows: Mr. H. B. Sifton, M.A.; Miss M. E. Currie, M.A., $1,000; Miss C. W. Fritz, M.Sc., $300; apparatus and supplies, $1,200.

Mr. Sifton came to us from the Seed Branch of the Department of Agriculture, Ottawa, for the express purpose of completing researches on poisonous plants and fodders especially with reference to veterinary science. He has been enabled through the grant extended to him to make substantial progress in assembling data for the publication of a book on this subject. There is such an insistent call from time to time for information on the matters involved in his investigation that facilities should be afforded for its completion.

Miss Currie has been working on the slime molds—a group of organisms of much interest from the standpoint of both pure and applied science. She has in the course of the last year published her first paper on this subject—a paper that has already won recognition: "A Critical Study on the Slime-Molds of Ontario." Trans. Roy. Can. Inst., Vol. XII, pp. 247-308, plates VIII-X, Toronto, 1919.

She has been enabled to continue investigations on their physiological behaviour, especially their parasitic relationships. It is becoming evident that these organisms exhibit a destructive role with regard to both bacteria and fungi.

Miss Clara Fritz has been determining cultural diagnostic features of the timber-destroying fungi—means of ready recognition from simple laboratory tests of the identity of destructive heart rot and other timber-destroying fungi. The aid received by her has enabled her to extend her investigations for a period of three months beyond the time provided for by a Dominion Research Scholarship. She is continuing these important researches with very considerable success and under the same auspices as last year.

Directly or indirectly through some class assistance given by Miss Currie and from apparatus and supplies purchased, the benefits of the Research Fund have been manifested by progress in such additional researches as studies on the sexuality of the fungi (a preliminary paper of which has just been published by Mr. G. H. Duff) and on the physiology of the fungi.

Biochemistry Under Direction of Professor A. Hunter.

The Department has begun a number of investigations dealing with the general subject of the Chemistry and Biochemistry of Proteins. The specific problems attacked under this heading are as follows:—

(1) The character of the amino acids and polypeptides liberated during the early stages of pancreatic digestion, together with the order and rate of their appearance.

(2) The characterization of the individual proteoses produced from protein in gastric digestion.

(3) The determination of the rate at which during acid hydrolysis of protein the products acquire the property of producing shock when injected into animals; with the object of defining more precisely than has yet been done the nature of the shock-producing substance.

(4) The study of the use of arginase in determining the arginine content of proteins.

On these investigations the first is the only one which has been under way for any length of time, and the only one on which it is possible to report as yet definite progress. It has been shown that it is possible to apply to the problem the butyl-alcohol extraction method of Dakin; and its use has enabled us to isolate a new group of digestion products, apparently polypeptide in nature, the study of which is likely to occupy us for a considerable period to come.

The other researches are as yet in their initial stages only, and it would be premature to make any statement regarding their probable outcome.

The grant was expended entirely upon the purchase of necessary apparatus and chemicals.

Physiology Under Direction of Professor J. J. R. Macleod.

Research.—Research in the Department has been undertaken by the aid of funds derived from two distinct and separate sources—one from the Research Fund of the President of the University, and the other from the Research Fund of the Medical Services, Department of Militia and Defence.

Research Fund of the President of the University.—Researches made possible by this fund have been as follows:—

1. Completion of work on The Influence of Alpha and Beta Emanations on the Eggs of Nereis, by Professor A. C. Redfield. Assistance in this case was afforded by the employment of a statistician of the Mathematical Department. Paper submitted to *Journal of Physiology,* Cambridge, England.

2. The Behaviour of Lactic Acid in the Blood in Conditions of Shock, Asphyxia and Anoxaemia. I have been engaged in this investigation off and on for several years, and during the present one have obtained results which I think will show quite clearly the precise conditions under which lactic acid is formed. The investigation entails considerable expense, and could not have been undertaken satisfactorily without the assistance of the Research Fund. Paper submitted to *American Journal of Physiology,* September, 1920.

3. Behaviour of the Respiratory Centre after removal of the Higher Portions of the Brain, also a course of researches extending over several years. Several of the results have already been published, and it is hoped that a complete and comprehensive report of the work will be ready for publication this summer. More work could have been done on this particular research had the necessary technical assistance been available.

4. Investigations of the Disturbance of Carbohydrates in the Tissues and Fluids of Various Marine Invertebrates and Fishes. Material for this investigation was collected at the Marine Biological Station of the Canadian Fisheries Board at

Nanaimo, B.C. A certain amount of material was investigated at the Station by biochemical methods, the apparatus and equipment being that of this Department of the University; the rest of the investigation was done in this Department by Messrs. R. S. Lang and Leslie Kilborn, who were paid for their work out of the research grant. The results of this research have been published in two papers in *The Quarterly Journal of Experimental Physiology.* It is expected during the forthcoming summer months to employ at least Mr. Kilborn and perhaps one other student in work of the same character.

5. An Investigation into the Disturbance of Carbohydrates in the Heart Muscles as Compared with that in Other Muscles of the Mammalian Body. This investigation is being made by Mr. D'Arcy Prendergast under myself. The expenses, both for material used, and for the payment of Mr. Prendergast are made from the Research Fund. It is impossible as yet to say what the outcome of this research may be. Paper on "Periodic Breathing," submitted to *American Journal of Physiology.*

6. An Investigation into the Possible Influence of the Rare Gases of the Atmosphere on the Physiological Condition of Animals. This investigation is being undertaken by Dr. E. Fidlar, who is devoting his entire time to the work. Dr. Fidlar had a previous training in laboratory work in various institutions, and has been appointed in this Department to a Fellowship paid out of the Research Fund. All the materials used in this research are also paid from this fund. The work has progressed favourably, but no results have as yet been obtained. The Laboratory is to be considered fortunate in having a man of Dr. Fidlar's type available to undertake this extremely difficult and very important research.

Research Committee of the Department of Militia and Defence. The work under this Committee is being done partly in this Laboratory, and partly under the supervision of Professor F. A. Hartman, in rooms which have been assigned for use in this connection, in the basement. The work undertaken in the Physiological Department has been placed under the immediate supervision of Capt. N. B. Taylor, who has been assigned for this purpose by the Surgeon-General, and is on full army pay as a captain. The researches in progress under this Committee in the Department of Physiology are as follows:—

1. Measurement of Blood Flow through the Hands under Varying Conditions, and the Influence on this Blood Flow of Massage and other therapeutic measures. This research is proving of great interest, but it is impossible at present to state whether the results will be of great practical value.

2. An investigation into the Nature of the Spread of Temperatures through Tissues of Living Animals, during the application of Heat or Cold, Locally on the Surface. The practical application in this research is of course in connection with the principles underlying treatment by thermic measures.

3. An investigation into the Effect on Muscles of Electrical Shocks from Condensers. This research is under the special direction of Professor Gilchrist of the Department of Physics.

Zymology Under Direction of Professor H. B. Speakman, M.Sc.

During the past year our work has been concerned with the production of acetone and butyl alcohol by fermentation methods on an industrial scale, and also with the biochemical mechanism whereby the organism is able to produce these organic compounds from starch. The following papers have been published in the various journals:—

"The Production of Acetone and Butyl Alcohol by a Bacteriological Process." J. Soc. Chem. Ind., 1919.

"Biochemistry of the Acetone and Butyl Alcohol Fermentation of Starch by Bacillus granulobacter pectinovorum." J. Biol. Chem., 1920.

"Seed-culture methods in the Production of Acetone and Butyl Alcohol." J. Ind. and Eng. Chem.. 1920.

"Gas Production during the Acetone and Butyl Alcohol Fermentation." J. Biol. Chem., 1920.

We are in the fortunate position, owing to the fact that our main problem is of interest and of great importance to both groups, of carrying on investigations, the results of which may be considered from the industrial and theoretical standpoint. I shall discuss our work in brief from the industrial standpoint.

During the last twenty years biological methods have been becoming more and more prominent in manufacturing industries. Various organisms have been shown to produce compounds which are of economic value, and it has been the ambition of the industrial chemist to replace the costly and complicated methods of organic and inorganic chemistry by the simpler and cheaper methods known to the biologist. I need only mention the work done in France and England in connection with the synthesis of rubber, and the magnificent work in Toronto during the war in the production of acetone, a vital necessity in the production of munitions. At the present time owing to widespread legislation in connection with the manufacture of alcoholic beverages the supply of fusel oil on this continent has fallen to an almost negligible amount. At the same time the demand has been steadily increasing, and directly owing to work done in University laboratories, here and elsewhere, industry has now, not a substitute but a superior article in butyl alcohol. In this connection I should like to state that the first paper published from the Department has been translated by M. Andre Dubosc, the distinguished French chemist, and re-published in his journal. Recently I also received a request from Howard Murray, Esq., of Montreal, that this paper and the third be incorporated in the forthcoming history of the work of the Imperial Munitions Board, Ottawa.

During the year several communications have been received from firms which are interested in this branch of industry. One of them, The Atlas Powder Co., Ltd., of Philadelphia, requested that one of their research chemists be allowed to work in the Department on fermentation problems. The firm has not only paid the expenses of the research but in addition the connection has been valuable to the Department owing to the fact that they have freely placed at our disposal the vast amount of technical information which such a large concern has accumulated. I only hope that in the near future we may be able to assist in a similar way some of the firms operating in this Province.

In the second place, I wish to bring to your notice the importance of the work from the more general scientific standpoint. We are considering a biological phenomenon which involves the degradation of starch by a living cell, with certain end-products. The schools of medical research are investigating in a similar way the normal and abnormal carbohydrate metabolism of man. In the fermentation we find acetoacetic acid, acetone and butyric acid, compounds which occur in the diabetic condition.

The organism is anaerobic and in carrying on this research we are helping in a small way to elucidate the problem which has puzzled plant physiologists since the time of Pasteur, namely, that of anaerobic respiration. Owing to the fact

that we are endeavouring to sort out the internal processes of a bacterium our work connects up in a similar way with the investigations of medical and plant pathologists and soil bacteriologists, the latter engaged in work which is of supreme importance to agriculture.

During the past year we have been in communication with the following investigators who have desired to keep in touch with the work of the Department:—

Prof. Hans Zinnser, Prof. of Bacteriology, Columbia University.

Dr. Barnett Cohen, Yale University.

Prof. Fred, Prof. of Bacteriology, Agricultural College, University of Wisconsin.

Prof. Paine, Prof. of Plant Physiol., University College, London, England.

Dr. Northrop, Rockefeller Institute, New York.

Prof. Schmidt, Prof. of Biochemistry, University of California.

In conclusion I wish to mention briefly our plans for the coming year. The work already in progress will be continued and the following new problems started.

(1) Under the auspices of the Canadian Council for Scientific Research Mr. Berkeley is starting an investigation of the possible uses of sulphite liquor in fermentation industries. At the present time it is impossible to carry on the production of butyl alcohol in Canada, in spite of the work done in Canada, owing to the high cost of maize. In sulphite liquor we have a source of fermentable sugar which is for all practical purposes inexhaustible and, being a by-product of the paper industry, very cheap. At the present time millions of gallons are being wasted, and in the light of national conservation this is a most important problem.

(2) Mr. Robinson is continuing his investigations for the Atlas Powder Co., Ltd. This year he is enquiring into the possible use of molasses as raw material. The results obtained from the research will be available for the information of persons in the Province who may be interested, and owing to the fact that from our beet industry we have a potential source of molasses I feel that this research is important.

Anatomy Under Direction of Professor J. Playfair McMurrich.

I beg leave to present the following report on the research work carried on in the Department of Anatomy during the past year.

1. The James H. Richardson Fellow, Dr. Herbert B. Willson, undertook at my suggestion a study of the finer anatomy of the human lung. A number of studies have been made during the last fifty years or so of the minute structure of the lungs of various domestic animals, but little has been done with regard to the human lung. And, furthermore, the ultimate ramifications of the bronchi were found to be so complicated in the forms that were studied that no little difference of opinion resulted as to their exact nature. It seemed, therefore, suitable that a study of the terminal branchings of the respiratory bronchi of the human lung, carried out by modern methods, should be made. The method adopted was the wax-plate method of reconstruction, whereby a practically exact model of a portion of the lung was made at an enlargement of one hundred diameters. The work of preparing the material, making the wax plates and building up the model required much patience, energy and time, and at the close of the session the model still remained incomplete. With the cessation of class work I was able to give a good deal of time to the work and Dr. Willson voluntarily

devoted practically all his time during the summer vacation to the completion of the model. Dr. Willson is now engaged in writing up his results and at the same time is making ready for the preparation of similar models of additional material.

I may say that the work has already yielded some interesting results and will, when written up, be a meritorious contribution to our knowledge of the human lung.

2. Dr. J. Milne Dickie, a member of the staff in Oto-laryngology, also carried on in my laboratory some studies of the development of the human ear, making use of the material contained in the Embryological Collection of this Laboratory. He also used the wax-plate method of reconstruction and has prepared several models which form part of a series with which it is hoped to illustrate the development of the human ear in all its stages.

3. Dr. J. C. Watt has been obliged to devote so much of his time to undergraduate instruction, that little opportunity was afforded for investigation. Nevertheless, he found time to complete a study of an anomalous kidney which threw some light on certain modifications in position and form that that organ undergoes during development. A paper giving the results of his observations was published in a recent number of the *Anatomical Record.*

Dr. Watt was also able to make a start upon a study of the precipitation of calcium salts in colloid media, the object being to gain information as to the physico-chemical conditions which underlie the processes of bone development. He was able to devote some time to this study during vacation and hopes to be able to carry it on throughout the present session.

4. As for myself, my time during the past session was very fully occupied with teaching and executive work, so much so that I found it impossible to secure a sufficient amount of consecutive time for laboratory studies. I have, however, revised my book on "The Development of the Human Body" for its sixth edition and have made considerable progress with a study of the anatomical work of Leonardo da Vinci. I hope to complete this study during the present session.

During vacation I spent much of my spare time in assisting Dr. Willson in his work, but the preparation of a syllabus of a course of lectures and a revision of our laboratory instructions, made necessary by the new conditions introduced by the Six Years' Course, interfered with plans that I had made looking to the completion of certain studies begun several years ago, but still incomplete.

Adequate opportunity for research work can be secured for this Department only by an enlargement of its staff and this will be possible only when a transfer to more spacious quarters becomes possible.

Department of Medicine Under Direction of Dr. Duncan Graham.

Research Work and Publications.

While no great amount of research work has been accomplished in the last year owing to reorganization, a good foundation has been laid for the ensuing year in the indexing of all literature relative to infant and child nutrition for the past twenty-one years. A complete subject and author index has been compiled of 3,600 references in all languages.

With the co-operation of the Department of Pathology and Bacteriology, a thorough investigation into the cause of the disease known as "Flu" was carried out. Clinical and laboratory studies were made on cases suffering from Ence-

phalitis Lethargica. The laboratory portion of the above investigations is still in progress and will be reported on at a later date.

The following research problems have been completed and published:—

(1) The summer's experience in Infectious Diarrhoea (a clinical and Bacteriological Study).—Edward Morgan.

(2) The effect of intravenous injection of calcium lactate on the Blood Calcium, and the benefit derived from the use of cod liver oil and phosphorus.—Roy Simpson and Alan Brown.

(3) Cod liver oil just as efficient as cod liver oil and phosphorus in increasing the blood calcium in rickets and tetany.—Roy Simpson and Alan Brown.

The following case reports and general papers have been published:—

(1) Hydro-therapy in infancy.—George Smith.

(2) A case of thrombosis of the mesenteric vein.—George Smith.

(3) Congenital atresia of the oesophagus.—George Smith.

(4) Child Health.—Alan Brown.

Sub-Department of Pediatrics.

The following is a list of research work that is in progress:

(1) Blood and urine chemistry in nephritis in children (in conjunction with Department of Pathological Chemistry), by Dr. Gladys Boyd.

(2) Sugar Tolerance in Infancy.—Gladys Boyd and Alan Brown.

(3) Blood volume in Infancy.—Edward Morgan.

(4) Further observations (chemical) on protein milk powder.—Ida McLachlin and Alan Brown.

(5) Malnutrition in older children. (A survey made possible through private contributions.)

1. To estimate amount of malnutrition in this city.

2. To demonstrate the efficiency of such clinics.

3. To indicate to the local Board of Health the best plan to adopt in coping with malnutrition in older children.—G. A. Davis and Alan Brown.

Factors not usually considered in the construction of a child's diet.—Alan Brown.

(6) Small text-book (not yet published, but ready for publication) for use of students and practitioners, entitled "Methods employed at the Hospital for Sick Children."—Alan Brown and Roy Simpson. Including foods, food values, percentages, methods of estimating percentages, etc., diets and various tests useful in the general practice of pediatrics.

(7) The interval method of feeding.—G. A. Davis and Alan Brown.

(8) Toronto as a Pediatric centre.—Alan Brown.

Faculty of Medicine.

In the Faculty of Medicine experimental research has been conducted under a special committee and the following investigations have been conducted or are at present being carried on. Publications of the results of this work may be expected within the next year.

Experiments.

Dr. Gallie:

Clinical problems of inflammation and repair in tendon and fascea and to study the changes in these tissues after transplantation.

Drs. R. R. Graham and Detweiler:

Study of infection in the intestinal tract with special reference to etiology and reflex disturbances.

Drs. Gallie and Janes:

(1) Study of circulation in dogs testes resulting from the severance of structures of the vas and artery.

(2) The possibility of the functional result after such a procedure.

(3) The functional and cellular activity of the testes when they are placed in abnormal positions.

Drs. Gallie and Campbell:

Experiments to investigate the cause of aneura and death resulting from injury to one kidney.

Dr. Keith:

A study in Anaemia.

Dr. D. E. Robertson:

A study of intussusception and toxins formed as a result of intestinal obstruction.

Dr. L. B. Robertson:

Experiments to investigate with regard to the cause and prevention of fatal toxaemia in infants and young children, following severe burns.

School of Engineering Research.

The progress of the School of Engineering Research during the past year has been quite satisfactory and encouraging. The exceptional and abnormal conditions prevailing in undergraduate courses due to the largely increased attendance, as well as the difficulty of securing research and other assistants, prevented the carrying out, in its entirety, of the programme of the Committee of Management. However, very satisfactory results were obtained in the investigations performed in the various Departments of this Faculty, during the year, which included researches in aerodynamics and air currents; wireless operation; fuel feed in furnaces; action of caustic soda on organic substances; sewage disposal methods; rivetted connections in bridges and steel buildings and copper smelting. A Bulletin promises to surpass in importance Bulletin No. 1, which created a very favourable impression throughout this country, where it was given a rather wide circulation, and has also received considerable commendation from scientific bodies and individuals throughout America and more distant parts.

The School of Engineering Research can be said to be undergoing a steady growth promising a future of large usefulness and influence.

APPENDIX B.

(1) Enrolment in the Colleges.
(2) Enrolment in University Subjects.
(3) Registration in Courses in the Faculty of Arts.
(4) Registration for Graduate Courses.

(1) Enrolment in the Colleges.

The students in University College were enrolled as follows:

——	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year—								
Pass	9	156	132	305	20	278	14	.....
Honours	14	33	36	106	27	80	1	.....
Second Year—								
Pass	8	35	.....	201	9	148	6	.....
Honours	9	9	43	33	18	36	.....	.....
Third Year—								
Pass	2	11	11	128	13	60	3	70
Honours	6	4	4	33	13	20	1	.....
Fourth Year—								
Pass	2	4	2	68	10	36	2	24
Honours	5	3	4	24	3	10	2	.....
Totals—								
Pass	21	206	145	702	52	522	25	94
Honours	34	49	87	196	61	146	4	.....

The students in Victoria College were enrolled as follows:

——	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year—								
Pass	2	85	45	115	7	94	18	.....
Honours	9	22	30	42	16	42	.....	7
Second Year—								
Pass	2	14	.....	70	3	49	4	.....
Honours	4	4	19	24	10	11	1	5
Third Year—								
Pass	1	3	8	91	4	27	7	54
Honours	5	3	3	12	6	10	1	4
Fourth Year—								
Pass	3	8	1	53	5	15	.....	16
Honours	4	3	3	19	6	6	.....	4
Totals—								
Pass	8	110	54	329	19	185	29	70
Honours	22	32	55	97	38	69	2	20

The students in Trinity College were enrolled as follows:

——	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year—								
Pass	5	35	9	36	1	30	3	.....
Honours	3	5	7	5	.....	6	.....	.....
Second Year—								
Pass	3	11	.....	19	2	15	2	.....
Honours	2	2	.....	13	5	5	1	.....
Third Year—								
Pass	.....	3	2	13	.....	7	1	9
Honours	3	3	3	2	4	3	.....	1
Fourth Year—								
Pass	.....	1	2	6	3	3	.....	1
Honours	2	2	2	2	.....	1	.....	1
Totals—								
Pass	8	50	13	74	6	55	6	10
Honours	10	12	12	22	9	15	1	2

The students in St. Michael's College were enrolled as follows:

——	Greek.	Latin.	Ancient History.	English.	German.	French.	Philosophy.	Ethics.
First Year—								
Pass	5	62	12	62	4	57	.....	.....
Honours	1	1	1	8	1	8	2	.....
Second Year—								
Pass	3	33	.....	47	4	40	12	.....
Honours	.....	.....	.....	8	2	5	9	9
Third Year—								
Pass	.....	10	.....	25	1	17	17	24
Honours	.....	.....	.....	4	.....	4	.....	.....
Fourth Year—								
Pass	3	6	.....	17	2	7	8	13
Honours	1	1	1	4	1	4	5	5
Totals—								
Pass	11	111	12	151	11	121	37	37
Honours	2	2	2	24	4	23	16	14

(2) Enrolment in University Subjects.

The following tables exhibit the numbers attending lectures in University subjects, together with the numbers of those taking the practical work in the laboratories:—

DEPARTMENT OF MATHEMATICS.

—	Pass.	Pass and Honours.	Honours.
Faculty of Arts—			
First Year	439	.....	79
Second Year	12	.....	105
Third Year	.....	.....	43
Fourth Year	.....	.....	8
Faculty of Medicine—			
First Year	12	.....	.....
Faculty of Applied Science—			
First Year	.....	403	.....
Second Year	.....	169	.....
Total	463	572	235

DEPARTMENT OF PHYSICS.

—	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	398	.....	113	113
Second Year	17	.....	41	58
Third Year	5	.....	38	43
Fourth Year	.....	.....	10	10
Graduate Students	.....	.....	20	14
Faculty of Medicine—				
First Year	.....	421	.....	421
Faculty of Forestry—				
First Year	29	.....	.....	29
Faculty of Household Science—				
First Year	17	.....	.....	17
Ontario Veterinary College Students	33	.....	.....	33
Total	499	421	222	738

DEPARTMENT OF BIOLOGY.

—	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	399		82	82
Second Year	35		45	90
Third Year	2		20	22
Fourth Year	3		5	8
Graduate Students				5
Faculty of Medicine—				
First Year		398		398
Second Year		227		227
Faculty of Applied Science—				
Fourth Year		15		15
Faculty of Forestry—				
First Year		16		16
Total	439	656	152	863

DEPARTMENT OF BOTANY.

—	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	342		78	78
Second Year	8		25	33
Third Year	6		4	10
Fourth Year			4	4
Graduate Students			17	17
Faculty of Applied Science		86		86
Faculty of Forestry—				
First Year		19		19
Second Year		5		5
Sixth Year		1		1
Ontario Veterinary College Students—				
First Year		33		33
Second Year		17		17
Total	356	161	128	303

DEPARTMENT OF CHEMISTRY.

—	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	427	.....	123	124
Second Year	47	.....	62	104
Third Year	27	.....	19	29
Fourth Year	4	.....	6	10
Graduate Students	.....	.....	.....	8
Faculty of Medicine—				
First Year	.....	419	.....	419
Faculty of Applied Science—				
First Year	.....	.....	.....	85
Second Year	.....	44	.....	64
Third Year	.....	73	.....	64
Fourth Year	.....	13	.....	8
Faculty of Forestry—				
First Year	24	.....	.....	24
Second Year	11	.....	.....	.....
Second Year (Arts and Forestry)	1	.....	.....	1
Third Year " " "	2	.....	.....	.....
Ontario Veterinary College Students	33	.....	.....	33
Total	576	549	210	973

DEPARTMENT OF PHYSIOLOGY

—	Pass	Honours.	Laboratory.
Faculty of Arts—			
Third Year	18	.....	18
Fourth Year	4	2	6
Graduate Students	.....	5	.....
Faculty of Medicine—			
Second Year	154	.....	154
Third Year	107	.....	107
Ontario Veterinary College Students	25	.....	25
Total	308	7	310

DEPARTMENT OF BIOCHEMISTRY.

—	Pass and Honours.	Honours.	Laboratory
Faculty of Arts—			
Third Year	23	27	14
Fourth Year	.....	9	9
Graduate Students	.....	5	4
Faculty of Medicine,—			
Second Year	232	.....	232
Graduate Students	.....	4	.....
Ontario Veterinary College Students	20	.....	20
Total	275	45	279

DEPARTMENT OF GEOLOGY.

—	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	349	.....	.....	.....
Second Year	18	.....	17	19
Third Year	3	.....	2	5
Fourth Year	2	.....	5	7
Teachers' Course	5	.....	.....	5
Graduate Students	.....	.....	4	4
Faculty of Applied Science—				
Second Year	.....	22	.....	.....
Third Year	.....	62	.....	12
Fourth Year	.....	38	.....	5
Faculty of Forestry—				
Second Year	.....	8	.....	.....
Third Year	.....	5	.....	5
Total	377	135	28	62

DEPARTMENT OF MINERALOGY.

—	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
Second Year	28	.....	26	54
Third Year	6	.....	19	25
Fourth Year	2	.....	12	14
Graduate Students	.....	.....	4	4
Faculty of Applied Science—				
First Year	.....	99	.....	99
Second Year	.....	62	.....	62
Third Year	.....	26	.....	26
Fourth Year	.....	5	.....	5
Faculty of Forestry—				
Second Year	.....	13	.....	13
Total	36	205	61	302

DEPARTMENT OF PHILOSOPHY.

—		History of Philosophy and Metaphysics.		Psychology.		Logic.		Ethics.	
		Pass.	Hon-ours.	Pass.	Hon-ours.	Pass.	Hon-ours.	Pass.	Hon-ours.
First Year	.....	.....	.....	.....	.....	.....	.....	.....	15
Second Year	.....	.....	12	40	12	40	12	.....	10
Third Year	.....	42	6	.....	6	.....	6	85	3
Fourth Year	.....	25	8	.....	8	.....	8	22	6
Graduate Students	16	.....	.....	.....	.....	.....	.....	.....	.....
Total	16	67	26	40	26	40	26	107	34

DEPARTMENT OF POLITICAL SCIENCE.

	Pass.	Honours.
Faculty of Arts—		
Department of Political Science—		
First Year	.....	17
Second Year	78	54
Third Year	107	44
Fourth Year	75	13
Graduate Students	.....	17
Department of Commerce and Finance—		
First Year	.....	33
Second Year	.....	14
Third Year	.....	4
Fourth Year	.....	6
Department of Modern History—		
Second Year	.....	9
Third Year	.....	11
Fourth Year	.....	7
Department of Philosophy—		
Third Year	6	.....
Department of Household Science—		
Fourth Year	22	.....
Department of Social Service—		
First Year	55	.....
Department of English and History—		
Second Year	17	.....
Faculty of Applied Science—		
Second Year	173	.....
Occasional Students	4	4
Totals	535	233

DEPARTMENT OF HISTORY.

	Pass.	Honours.
First Year	72	57
Second Year	145	86
Third Year	174	73
Fourth Year	122	42
Total	513	258

DEPARTMENT OF ITALIAN AND SPANISH.

	Italian.		Spanish.	
	Pass.	Honours.	Pass.	Honours.
First Year	30	6	131	63
Second Year	10	4	59	31
Third Year	.....	3	6	4
Fourth Year	.....	8	.....	5
Total	40	21	196	103

DEPARTMENT OF HOUSEHOLD SCIENCE.

	General Course.	Household Science Course.	Total.
Faculty of Arts—			
First Year	.....	15	15
Second Year	.....	18	18
Third Year	11	29	40
Fourth Year	3	25	28
Graduate Students	.....	.....	3
Faculty of Education—			
Household Science Course	.....	.....	31
General Course	.....	.....	124
Summer Session	.....	.....	67
	14	87	326

(3) Registration in Courses in the Faculty of Arts, 1919-1920.

Courses.	First Year.				Second Year.				Third Year.				Fourth Year.				Total.
	U.C.	V.C.	T.C.	M.C.	U.C.	V.C.	T.C.	M.C.	U.C.	V.C.	T.C.	M.C.	U.C.	V.C.	T.C.	M.C.	
Pass Course	248	81	38	59	99	23	17	37	67	40	9	24	35	28	4	14	823
Household Science G.C.	.....	.....	.....	.....	.....	.....	.....	.....	14	6	1	1	7	15	.....	.....	44
Classics	2	4	3	1	8	2	2	.....	4	3	3	.....	1	3	2	.....	38
Greek and Hebrew	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Orientals	.....	.....	.....	.....	.....	1	.....	.....	1	1	.....	.....	2	.....	.....	.....	5
Orientals (Greek)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moderns	42	19	1	7	21	8	3	5	14	8	2	3	10	6	.....	4	153
English and History (Classics)	10	6	.....	.....	2	2	.....	.....	1	3	.....	.....	2	2	.....	.....	28
Eng. and Hist. (Moderns)	11	10	1	1	8	3	2	2	8	2	.....	.....	9	5	1	.....	63
Modern History	2	3	1	.....	5	5	.....	.....	8	2	1	.....	3	5	1	.....	36
Political Science	15	2	.....	.....	35	17	3	1	27	16	1	.....	8	6	1	.....	132
Commerce and Finance	27	7	.....	.....	11	5	.....	.....	3	1	.....	.....	4	1	1	.....	60
Philosophy	.....	.....	1	.....	3	4	5	9	2	3	1	.....	5	2	1	5	41
Philosophy (English and History)	9	7	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
Mathematics and Physics	26	14	1	.....	9	5	1	.....	21	3	.....	.....	6	4	1	.....	91
Natural and Physical Sciences	41	16	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
Physics	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	4
Biology	.....	.....	.....	.....	4	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	7
Biological and Phys. Sciences	.....	.....	.....	.....	2	1	.....	.....	3	1	.....	.....	3	2	.....	.....	12
Physiological and Biochem. Scs.	.....	.....	.....	.....	10	3	.....	.....	6	3	.....	.....	6	.....	.....	.....	28
Chemistry and Mineralogy	.....	.....	.....	.....	5	2	.....	.....	4	3	.....	.....	3	3	.....	.....	20
Chemistry	.....	.....	.....	.....	6	2	3	.....	8	2	.....	.....	2	.....	.....	.....	23
Geology and Mineralogy	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	1	.....	3
Household Science	.....	.....	.....	.....	.....	1	.....	.....	4	.....	2	.....	1	1	1	.....	10
Household Economics	7	8	.....	.....	8	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
Science for Teachers	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5
Arts and Forestry	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	5
Total of courses taken	441	177	52	72	239	96	37	54	199	100	20	28	112	83	14	23	1,747
Total of students registered	440	175	52	72	239	96	36	54	199	100	20	28	112	83	14	23	.....

(4) Registration for Graduate Courses.

Faculty of Arts:

	M.A.	Ph.D.	Graduate
Department of Classics	1	....	2
" Oriental Languages	1	1	....
" English	9	....	3
" Romance Languages	2	1	1
" German	1	1	1
" History	5	1	....
" Political Science	9	3	4
" Philosophy	9	3	14
" Mathematics	2	....	....
" Educational Theory	10	....	9
" Physics	9	5	1
" Astronomy	2	....	....
" Chemistry	6	3	....
" Biochemistry	1	....	1
" Physiology	1	1	....
" Biology	1	3	....
" Botany	9	6	....
" Anatomy	....	1	....
" Geology	1	1	1
" Food Chemistry	3	....	....
" Household Science	1	....	2
" Zymology	....	1	1
" Pathology	....	1	....
" Minerology	2	....	....
" Bacteriology	1	....	....
Miscellaneous	....	1	....
	86	33	40

Faculty of Medicine:

	M.D.
	10
	10

APPENDIX C.

Results of Examinations.

(1) Faculty of Arts.
(2) Faculty of Medicine.
(3) Faculty of Applied Science and Engineering.
(4) Faculty of Forestry.
(5) Faculty of Education.
(6) Faculty of Music.

(1) Faculty of Arts.

Senior Matriculation.

Courses.	University of Toronto.	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals.	Passed.	Starred.	Failed.	Transfer'd.	Aegrotat.	Deferred.	Debarred.
Pass	....	69	25	10	23	127	45	41	41	....	5	....	35
Supplementals	....	1	2	....	1	4	2	2	.....	....	1	....	.....
Moderns	....	3	....	....	....	3	2	1	.....	....	....	....	1
Eng. and Hist. (Class.)	....	1	2	....	....	3	3	.....	.....	1	....	....	.....
Eng. and Hist. (Mod.)	....	1	2	....	....	3	2	.....	1	1	....	....	.....
Political Science	....	3	....	....	....	3	2	1	.....	2	....	....	1
Commerce and Finance	....	2	....	....	....	2	.....	1	1	....	....	....	1
Phil., Eng. and History	....	....	1	....	....	1	.....	1	.....	1	....	....	1
Math. and Physics	....	1	....	....	....	1	.....	1	.....	....	....	....	.....
Science	....	3	....	1	....	4	3	1	.....	2	....	....	1
Household Economics	....	1	....	....	....	1	1	.....	.....	....	....	....	.....
Totals	....	85	32	11	24	152	60	49	43	7	6	....	40

First Year.

Courses.	University of Toronto.	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals.	Passed.	Starred.	Failed.	Transfer'd.	Aegrotat.	Deferred.	Debarred.
Pass	....	169	57	26	27	279	145	82	52	....	5	....	26
Supplementals	....	30	5	7	12	54	39	15	.....	....	....	....	.....
Classics	....	2	3	3	1	9	7	.....	.....	2	....	....	.....
Moderns	....	37	19	1	7	64	42	8	.....	14	....	....	.....
Eng. and Hist. (Class.)	....	8	4	....	....	12	8	.....	.....	4	....	....	.....
Eng. and Hist. (Mod.)	....	8	8	2	1	19	12	.....	.....	7	....	....	.....
Modern History	....	1	2	1	....	4	2	.....	.....	2	....	....	.....
Political Science	....	10	2	....	....	12	9	1	.....	2	....	....	.....
Commerce and Finance	....	22	7	....	....	29	14	1	1	13	1	....	.....
Philosophy	....	....	....	1	....	1	.....	.....	.....	1	....	....	.....
Phil., Eng. and History	....	9	5	2	1	17	16	1	.....	....	....	....	.....
Math. and Physics	....	21	13	1	....	35	20	5	.....	10	1	2	2
Science	....	38	16	3	3	60	48	7	.....	5	....	1	1
Household Economics	....	6	8	....	....	14	12	2	.....	....	1	....	.....
Arts and Forestry	....	1	....	....	....	1	.....	1	.....	....	....	....	.....
Occasional	33	7	1	....	2	43	15	3	25	....	....	....	.....
Teachers'	8	....	....	....	....	8	6	.....	2	....	....	....	.....
Totals	41	369	150	47	54	661	395	126	80	60	8	3	29

Second Year.

Courses.	University of Toronto.	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. Michael's College.	Totals.	Passed.	Starred.	Failed.	Transfer'd.	Aegrotat.	Deferred.	Debarred.
Pass	....	96	22	15	31	164	81	60	23	....	5	....	39
Supplementals	....	25	6	1	7	39	29	10	....	....	....	....	....
Classics	....	8	2	1	....	11	10	....	....	1	....	....	....
Greek and Hebrew	....	....	....	1	....	1	1	....	....	....	....	....	....
Orientals	....	....	1	....	....	1	1	....	....	....	....	....	....
Orientals (Greek)	....	1	....	....	....	1	1	....	....	....	....	....	....
Moderns	....	20	8	2	5	35	22	10	....	3	....	....	....
English and History (Cl.)	....	2	2	1	....	5	4	....	....	1	....	....	....
English and History (Mod.)	....	8	3	2	2	15	13	....	....	2	1	....	1
Modern History	....	5	4	....	....	9	9	....	....	....	....	....	....
Political Science	....	33	17	3	1	54	41	4	5	4	3	....	5
Commerce and Finance	....	9	3	....	....	12	3	6	2	1	....	3	4
Philosophy	....	2	4	5	9	20	18	2	....	....	1	....	2
Mathematics and Physics	....	9	5	1	....	15	13	2	....	....	....	1	1
Physics	....	1	....	....	....	1	....	1	....	....	....	1	1
Biology	....	3	....	....	....	3	2	....	1	....	....	....	....
Biological and Physical Scs.	....	1	1	....	....	2	1	....	1	....	....	....	....
Physiol. and Biochem. Scs.	....	5	....	....	....	5	4	1	....	....	....	....	....
Chemistry and Mineralogy	....	4	1	....	....	5	5	....	....	....	....	....	....
Chemistry	....	3	1	3	....	7	6	....	....	1	....	....	....
Geology and Mineralogy	....	....	....	....	....	....	....	....	....	....	....	....	....
Household Science	....	....	1	....	....	1	1	....	....	....	....	....	....
Household Economics	....	4	7	....	....	11	6	5	....	....	....	1	1
Science for Teachers	....	1	1	....	....	2	....	2	....	....	....	....	....
Arts and Forestry	....	1	2	....	....	3	....	1	2	....	....	....	....
Occasionals	30	5	....	....	....	35	17	....	18	....	....	....	....
Teachers	20	....	....	....	....	20	11	9	....	....	....	....	....
Totals	50	246	91	35	55	477	299	113	52	13	10	6	54

Third Year.

Courses.	University of Toronto.	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. Michael's College.	Totals.	Passed.	Granted standing on Active Serv.	Starred.	Failed.	Transferred	Aegrotat.	Deferred.	Debarred.
Pass	....	67	46	7	23	143	91	9	37	6	....	1	....	25
Supplementals	....	15	4	....	3	22	19	.....	3	....	....	....	....	..
House. Science (Gen. Course)	....	14	6	1	1	22	14	.....	8	....	....	....	....	4
Classics	....	4	2	3	....	9	9	.....	....	....	....	3	....	..
Orientals	....	1	1	....	....	2	1	.....	1	....	....	....	....	..
Moderns	....	12	6	2	3	23	21	.....	2	....	....	1	....	..
English and History (Cl.)	....	1	3	....	....	4	4	.....	....	....	....	....	....	..
English and History (Mod.)	....	7	2	....	....	9	9	.....	....	....	....	....	....	..
Modern History	....	8	3	1	....	12	11	1	....	....	....	....	....	..
Political Science	....	27	16	1	....	44	37	1	5	1	....	1	....	..
Commerce and Finance	....	3	1	....	....	4	4	.....	....	....	....	....	....	..
Philosophy	....	3	3	1	....	7	6	1	....	....	....	....	....	..
Mathematics and Physics	....	20	4	....	....	24	20	.....	4	....	....	....	....	..
Physics	....	3	....	....	....	3	3	.....	....	....	....	....	....	..
Biology	....	1	2	....	....	3	3	.....	....	....	....	....	....	..
Biological and Physical Scs.	....	3	1	....	....	4	4	.....	....	....	....	....	....	..
Physiol. and Biochem. Scs.	....	6	3	....	....	9	9	.....	....	....	....	....	....	..
Chemistry and Mineralogy I	....	5	2	....	....	7	6	1	....	....	....	....	....	..
Chemistry and Mineralogy II	....	....	2	....	....	2	1	1	....	....	....	....	....	..
Chemistry	....	8	2	....	....	10	8	.....	2	....	....	....	....	..
Geology and Mineralogy	....	....	1	....	....	1	1	.....	....	....	....	....	....	..
Household Science	....	3	....	2	....	5	3	.....	2	....	....	....	....	..
Science for Teachers	....	1	....	....	....	1	1	.....	....	....	....	....	....	..
Occasionals	....	5	3	1	....	9	7	.....	....	2	....	....	....	..
Teachers	18	....	....	....	....	18	16	.....	1	1	....	....	....	..
Totals	18	217	113	19	30	397	308	14	65	10	....	6	....	29

Fourth Year.

Courses.	University of Toronto.	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. Michael's College.	Totals.	Passed.	Granted standing on Active Service.	Starred.	Failed.	Aegrotat.	Deferred.	Transferred.	Pass Deg.
Pass	....	43	34	5	13	95	55	16	22	2	1	....	..	..
Supplementals	....	4	....	....	1	5	4	.....	1	....	1	....	..	..
Household Science (Gen. C.)	....	7	15	....	....	22	19	.....	2	1	1	....	..	..
Classics	....	1	3	2	....	6	6	.....	....	....	....	....	..	..
Orientals	....	1	....	....	....	1	1	.....	....	....	....	....	..	..
Orientals (Greek)	....	1	....	....	....	1	....	.....	1	....	....	....	..	..
Moderns	....	10	6	....	4	20	20	.....	....	....	1	....	..	2
English and History (Clas.)	....	3	4	....	....	7	4	3	....	....	1	....	..	..
English and History (Mod.)	....	10	5	1	....	16	15	1	....	....	....	....	..	..
Modern History	....	4	5	1	....	10	9	1	....	....	2	....	..	..
Political Science	....	13	6	1	....	20	12	7	1	....	1	....	..	..
Commerce and Finance	....	4	2	1	....	7	6	1	....	....	....	....	..	..
Philosophy	....	5	4	2	5	16	12	4	....	....	1	....	..	..
Mathematics and Physics I.	....	5	2	....	....	7	1	5	1	....	....	....	..	..
Mathematics and Physics II.	....	5	3	1	....	9	4	2	3	....	....	1	..	..
Physics	....	3	....	....	....	3	1	2	....	....	....	....	..	..
Biological and Physical Scs.	....	2	2	....	....	4	3	.....	1	....	1	....	..	..
Phys. and Biochem. Scs.	....	7	1	....	....	8	6	2	....	....	....	....	..	..
Chem. and Mineralogy I.	....	2	2	....	....	4	4	.....	....	....	....	....	..	..
Chem. and Mineralogy II.	....	1	1	....	....	2	1	.....	1	....	....	....	..	..
Chemistry	....	1	....	....	....	1	1	.....	....	....	....	....	..	..
Geology and Mineralogy	....	1	....	1	....	2	1	.....	1	....	....	....	..	..
Household Science	....	1	1	1	....	3	2	.....	1	....	....	....	..	..
Science for Teachers	....	1	....	....	....	1	....	.....	1	....	....	....	..	..
Arts and Forestry	....	2	....	....	....	2	....	.....	2	....	....	....	..	..
Occasional	....	1	1	1	....	3	3	.....	....	....	....	....	..	..
Totals	....	138	97	17	23	275	190	44	38	3	10	1	..	2

(2) Faculty of Medicine.

——	Passed.	Starred.	Failed.
First Year (Five Years' Course)	144	32	45
First Year (Six Years' Course)	84	35	35
Second Year	154	61	12
Third Year	107	64	11
Fourth Year	97	30	3
Fifth Year	61	23	4

(3) Faculty of Applied Science.

—	Passed with Honours.	Passed.	Starred.	Failed.
First Year:				
General	62	195	103	24
Chemical Engineering	34	47	24	1
Architecture	4	8	4	1
Second Year:				
Civil Engineering	6	24	14	3
Mining Engineering	3	15	6	1
Mechanical Engineering	5	24	12	1
Architecture	1	2	1	.....
Chemical Engineering	10	28	10	2
Electrical Engineering	10	26	10	.....
Metallurgical Engineering	1	2	1	.....
Third Year:				
Civil Engineering	11	24	8	.....
Mining Engineering	2	10	6	.....
Mechanical Engineering	7	20	8	2
Architecture	3	6	3	1
Analytical and Applied Chemistry	9	6	3	.....
Chemical Engineering	2	8	3	.....
Electrical Engineering	9	14	5	2
Metallurgical Engineering	1	2	1	.....
Fourth Year:				
Civil Engineering	15	19	.....	.....
Mining Engineering	.....	5	.....	.....
Mechanical Engineering	7	8	.....	.....
Architecture	3	1	.....	.....
Analytical and Applied Chemistry	2	2	.....	.....
Chemical Engineering	1	4	.....	.....
Electrical Engineering	14	11	1	.....
Metallurgical Engineering	1	.....	.....	.....

(4) Faculty of Forestry.

—	Passed.	Honours Deferred.	Failed.
First Year	5	9	4
Second Year	10	2	3
Third Year	1	4	2
Fourth Year	2	.....	.....
Fifth Year	.....	1	.....
Sixth Year	.....	1	.....

(5) Faculty of Education.

—	Passed.	Failed.
First-Class Grade B Course	232	.....
First-Class Grade A Course	4	.....
High School Assistants' Course	77	.....
*Specialists	40	.....
Household Science	25	.....
Bachelor of Pedagogy (passed in part)	4	.....
Doctor of Pedagogy	2	.....
Doctor of Pedagogy (passed in part)	12	.....
Number who failed in whole or part	.....	11

* Many of these are included among those who passed in the High School Assistants' Course.

(6) Faculty of Music.

—	Passed.	Starred.	Failed.
Bachelor of Music:			
First Year	6	.....	.....
Second Year	1	2	.....
	7	2	.....
Local Examinations:	514	.....	66

APPENDIX D.

Geographical Distribution of Students.

The geographical distribution of students is as follows:

FACULTY OF ARTS.

	University of Toronto.	University College.	Victoria College.	Trinity College.	St. Michael's College.	Total
Ontario: (1) Province	43	566	326	86	83	1,104
(2) Toronto	60	403	114	27	89	693
Nova Scotia	3	7	.....	.....	1	11
New Brunswick	.....	5	3	.....	.....	8
Prince Edward Island	.....	1	.....	.....	.....	1
Quebec	2	3	2	1	2	10
Manitoba	8	2	3	1	.....	14
Saskatchewan	9	11	21	1	.....	42
Alberta	2	7	3	1	.....	13
British Columbia	2	12	7	2	.....	23
Yukon Territory	.....	1	.....	.....	.....	1
United States	11	9	3	2	8	33
Elsewhere	9	7	18	2	2	38
Duplicate registrations	.....	.....	.....	.....	.....	2
Totals	149	1,021	500	123	185	1,989

SUMMARY.

	Faculty of Arts.	Graduate Studies.	Faculty of Medicine.	Faculty of Applied Science.	Faculty of Education	Faculty of Forestry.	Faculty of Music.	Department of Social Service.	Returned Soldiers' Matric. Class.	Totals.
Ontario:										
(1) Province	1,104	66	716	471	320	19	7	168	78	2,949
(2) Toronto	693	80	412	299	84	18	11	151	80	1,828
Nova Scotia	11	2	5	2	.....	1	.....	10	.....	31
New Brunswick	8	1	2	2	.....	2	.....	5	1	21
Prince Edward Island	1	1	1	.....	.....	.....	.....	.....	.....	3
Quebec	10	.....	10	4	2	1	.....	6	2	35
Manitoba	14	.....	21	3	2	1	1	.....	.....	42
Saskatchewan	42	2	39	8	5	.....	.....	.....	1	97
Alberta	13	3	13	13	4	.....	.....	2	2	50
British Columbia	23	4	36	9	3	5	.....	4	2	86
Yukon	1	.....	2	.....	.....	.....	.....	.....	.....	3
United States	33	7	13	4	1	.....	1	3	2	64
Elsewhere	38	3	14	4	2	1	.....	6	4	72
Duplicate registrations	2	.....	.....	.....	.....	.....	.....	.....	.....	44
Totals	1,989	169	1,284	819	423	48	20	355	172	5,237

The students from the Province of Ontario are distributed as follows:

County.	Faculty of Arts.	Graduate Studies.	Faculty of Medicine.	Faculty of Applied Science.	Faculty of Education.	Faculty of Forestry.	Faculty of Music.	Department of Social Service.	Returned Soldiers' Matric. Class.	Totals.
Algoma	13	.....	4	3	.....	.....	.....	2	2	24
Brant	39	.....	19	19	8	.....	.....	2	3	90
Bruce	28	2	23	15	12	.....	.....	9	7	96
Carleton	57	3	20	11	6	3	.....	3	5	108
Dufferin	7	.....	9	3	2	.....	.....	3	2	26
Dundas	12	1	3	2	4	1	.....	1	.....	24
Durham	8	1	11	5	8	.....	.....	6	2	41
Elgin	17	1	16	9	6	.....	1	6	.....	56
Essex	32	.....	21	7	6	.....	.....	1	1	68
Frontenac	3	.....	8	.....	1	.....	1	1	.....	14
Glengarry	3	1	4	.....	.....	.....	.....	1	.....	9
Grenville	5	1	3	3	2	.....	.....	.....	.....	14
Grey	30	3	29	17	9	.....	.....	4	1	93
Haldimand	16	1	13	8	8	.....	.....	2	1	49
Halton	20	3	10	9	4	.....	1	6	4	57
Hastings	19	1	17	6	1	.....	.....	1	.....	45
Huron	51	4	20	17	28	1	.....	2	2	125
Kenora	2	.....	5	1	.....	.....	.....	.....	.....	8
Kent	21	.....	23	7	6	.....	1	.....	.....	58
Lambton	21	.....	24	11	5	1	.....	5	.....	67
Lanark	15	2	10	6	7	2	.....	4	.....	46
Leeds	21	1	15	3	4	1	.....	3	.....	48
Lennox and Addington	11	1	7	1	1	.....	.....	1	.....	22
Lincoln	20	3	19	8	7	.....	.....	6	1	64
Manitoulin	1	.....	4	.....	.....	.....	.....	.....	.....	5
Middlesex	44	6	13	24	24	.....	.....	8	2	121
Muskoka	3	.....	3	5	.....	1	.....	2	.....	14
Nipissing	8	.....	4	5	2	.....	.....	1	3	23
Norfolk	10	2	6	9	3	.....	.....	4	2	36
Northumberland	20	.....	9	2	4	.....	.....	3	1	39
Ontario	41	5	22	25	7	.....	.....	8	4	112
Oxford	27	2	28	11	8	.....	.....	3	.....	79
Parry Sound	3	.....	6	2	.....	.....	.....	1	.....	12
Peel	31	1	17	12	5	2	.....	4	.....	72
Perth	51	.....	37	20	20	1	1	3	2	135
Peterborough	34	1	10	5	4	.....	.....	10	2	66
Prescott	1	.....	.....	1	2	.....	.....	.....	.....	4
Prince Edward	4	.....	4	2	4	.....	.....	.....	.....	14
Renfrew	17	.....	4	2	1	1	.....	1	1	27
Russell	1	.....	3	.....	2	.....	.....	.....	.....	6
Simcoe	68	4	48	27	20	.....	1	9	12	189
Stormont	6	.....	3	1	3	.....	.....	.....	.....	13
Sudbury	3	.....	4	2	.....	1	.....	.....	.....	10
Thunder Bay	6	.....	3	2	1	.....	.....	1	2	15
Temiskaming	4	.....	2	3	.....	.....	.....	.....	2	11
Victoria	15	3	15	12	10	.....	.....	1	.....	56
Waterloo	22	1	16	28	8	.....	.....	6	.....	81
Welland	21	1	25	13	2	.....	.....	2	.....	64
Wellington	53	7	46	9	17	1	.....	8	1	142
Wentworth	77	3	15	33	26	1	1	10	3	169
York	62	1	36	45	12	2	.....	14	10	182
Toronto	693	80	412	299	84	18	11	151	80	1,828
Totals	1,797	146	1,128	770	404	37	18	319	158	4,777

APPENDIX E.

Publications by Members of the Staff.

Faculty of Arts.

Department of Astrophysics.

Chant, C. A. (In conjunction with F. W. Merchant).—"Mechanics for the Upper School." (318 pages. Copp, Clark Co.)

Department of Biochemistry.

Voegtlin, C., Neill, M. H., Hunter, A.—"The Influence of Vitamines on the Course of Pellagra." (Bull. No. 116, Hyg. Lab., U.S. Public Health Service, Washington, January, 1920.)

Hunter, A.—"Some Problems of the Fox-Raising Industry." (Bull. No. 8, Council for Sci. and Ind. Res., Ottawa, 1920.)

Hunter, A. and Ward, F. W.—"Comparative Studies of Purine Metabolism in various Representative Mammals." (Trans. Roy. Soc. of Can., Vol. XIII, Section V, p. 7, 1919.)

Department of Biology.

Clemens, W. A.—"The Muttonfish." (Bulletin 4 of the Biological Board of Canada, 1920.)

Craigie, E. H.—"On the Relative Vascularity of Various Parts of the Central Nervous System of the Albino Rat." (Journal of Comparative Neurology, Vol. 31, No. 5, June 15, 1920.)

Huntsman, A. G.—"Lakes and Fishes." (Canad. Fisherman, Vol. VI, 1919.)

"Research and the Fishing Industry." (Canad. Fisherman, Vol. VI, 1919.)

"Variation of Fishes according to Latitude." (Science, N.S., Vol. L, 1919.)

"Life under Water." (Canad. Fisherman, Vol. VII, 1920.)

"The Growth of Fishes." (Trans. Amer. Fisheries Society, Vol. XLIX, 1919, 1920.)

"Eastern Canadian Plankton." 4. Thaliacea. (Contrib. Canad. Biology, 1919.)

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Walker, E. M.—"The Terminal Abdominal structures of Orthopteroid Insects: A Phylogenetic Study." (Annals of the Entomological Society of America, Vol. XII, No. 4, December, 1919, pp. 267-316, with plates XX-XXVIII.)

"Symposium on the Life Cycles of Insects—The Orthopteroid Orders." (Annals of the Entomological Society of America, Vol. XIII, No. 2, March, 1920.)

"Recent Canadian Publications." (Can. Ent., Vol. LI, 1919, pp. 280-283, 1.c. Vol. LII, 1920, pp. 22-24, 47-48.)

Wallace, N. A.—"The Isopoda of the Bay of Fundy." (Univ. of Toronto Studies Biol. Series, No. 18, 1919), also (Studies from the Biological Stations, No. 1, 1919).

Department of Botany.

Currie, Miss M. E.—"A Critical Study of the Slime-Molds of Ontario." (Trans. Roy. Can. Inst., 1919, pp. 247-308, Plates VIII-X.)

Duff, G. H.—"The White Pine Blister Rust." (Proc. Hamilton Assoc., Adv. Lit. Sc. and Art, XXIX, 1919.)

"Phytopathology, An Economic Science." (Proc. Ham. Assoc. Adv. Lit. Sc. and Art XXIX, 1919.)

"Development of the Geoglossaceae." (Preliminary Communication—Bot. Gaz., April, 1920.)

Faull, J. H.—"Needle Blight of White Pine." (Report of the Minister of Lands, Forests and Mines of the Province of Ontario, 1919.)

"Survey of Diseases of Timber Trees in Ontario, I." (Report of the Minister of Lands, Forests and Mines of the Province of Ontario, 1919.)

McCallum, A. W.—"The Occurrence of Bulgaria platydiscus in Canada." (Mycologia, Vol. XI, No. 6, November, 1919.)

Wright, Miss G.—"The Pit-Closing Membrane in the Ophioglossaceae."

Department of Chemistry.

Allan, F. B.—"The Reaction of certain derivatives of Phthalic Anhydride with Benzene in the presence of Aluminium Chloride." (The Royal Society of Canada.)

With Smith, M. E.—"The preparation of the three Benzoylbenzoic Acids." (The Royal Society of Canada.)

Kenrick, F. B., and Martin, W. H.—"The Scattering of Light by dust-free Liquids." (Royal Society of Canada, May, 1920.)

Department of Classics.

Bell, A. J.—"The German Universities and the War." (Acta Victoriana War Suppl., Xmas, 1919.)

"Might and its Champions." (Acta Victoriana for January, 1920.)

"New France and New England." (Acta Victoriana for February, 1920.)

DeWitt, N. W.—"The Primitive Roman Household." (Classical Journal, Vol. XV, No. 4, January, 1920, pp. 216-227.)

Hutton, M.—"Artificial substitutes for Christianity." (Ontario Educational Association, 1919.)

"Gladstone and Disraeli." (Ontario Educational Association, 1920.)

"Art and Humour." (Royal Society of Canada, Section II, 1920.)

Department of English.

Clawson, W. H.—"Arnold Bennett." (April, 1920, Canadian Bookman.)

Waddington, Miss M. M.—"The Development of British Thought from 1820-90, with special reference to German influences." (J. M. Dent & Sons, 1919.)

Department of Geology.

Coleman, A. P.—"The Glacial History of Prince Edward Island and of the Magdalen Islands." (Royal Soc. Can.)

"Extent and Thickness of the Labrador Ice Sheet." (Bull. Geol. Soc. Am.)

Parks, W. A.—"Preliminary description of a new species of Trachodont Dinosaur from the Belly River Formation of Alberta." (Trans. Royal Soc., Canada, 1919.)

"The Osteology of the Trachodont Dinosaur, Kritosaurus incurvimanus." (University of Toronto Studies, 1920.)

With Stewart, Miss H.—"The Stratigraphy and Palaeontology of the Toronto District, Part I, Pelecrypoda." (Report Bureau of Mines, Ontario, Vol. XXIX, 1920.)

Department of History.

Wallace, W. S.—"The Bystander Papers." (Canadian Bookman, October, 1919.)

"The Growth of Canadian National Feeling." (Canadian Historical Review, June, 1920.)

Department of Mineralogy.

Thomson, E.—"Phosgenite from South-West Africa." (American Mineralogist.)

Walker, T. L.—"Bornite from Usk, B.C." (The American Mineralogist.)

"Allemontite from Atlin, B.C." (American Mineralogist.)

"Skutterudite from Cobalt, Ont." (American Mineralogist.)

Department of Philosophy.

Bott, E. A.—"The Mentality of Convalescence." (Chicago Institute of Medicine, Vol. 2, No. 5, 1919, pp. 218-230.)

"Training for Lay Workers in Functional Restoration." (Medical Record, May, 1919.)

"Mechanotherapy." (The American Journal of Orthopedic Surgery, Vol. XVI, No. 7, pp. 441-446, July, 1918.)

Brett, G. S.—"The Revolt Against Reason: A contribution to the history of thought from 1600 to 1900." (Proceedings of The Royal Society of Canada, 1919.)

Hume, J. G.—"What is Bolshevism." (Canadian Churchman, Jan. 15th, 1920.)

Windle, Sir Bertram.—"Science and Morals." (Burns and Oates, London.)

"Vitalism and Scholasticism." (Sands and Company, London and Edinburgh.)

"The Endowment of Research." (Teachers' Encyclopaedia—Pitman and Co.)

Department of Physics.

Burton, E. F.—"A New Method of Weighing Colloidal Particles." (Proc. Roy. Soc. A., Vol. 95, p. 480.)

With Dr. John Satterly.—"The Combustibility of Mixtures of Hydrogen and Helium." (Proc. Roy. Soc. Can., III, XIII, p. 211, 1919.)

Foster, Miss A. W.—"Periodic Precipitation." (Proc. Roy. Soc. Can., 1918, III, p. 55.)

Zumstein, R. V.—"Regularities in the Spectra of Lead and Tin." (Proc. Roy. Soc. Can., 1918, III, p. 59.)

McLean, Stuart.—"Absorption of Helium by Charcoal." (Proc. Roy. Soc. Can., 1918, III, p. 79.)

Foster, A. W.—"The Effect of Chlorine on Periodic Precipitation." (Jour. Phys. Chem., Vol. 23, No. 9, December, p. 645, 1919.)

McLennan, J. C.—"Science and Industry in Canada." (Royal Society of Arts, London, March 4, 1919.)

"Science and its Application to Marine Problems." (Northeast Coast Institution of Engineers and Shipbuilders, 10th July, 1919.)

"Report on the Helium Resources of the British Empire." (Department of Mines, Ottawa.)

McLennan, J. C., and Elworthy, R. T.—"The Use of the Jamin Interferometer for the Estimation of Small Amounts of Helium or Hydrogen in Air." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 19.)

McLennan, J. C.—"The Production of Helium from the Natural Gases of Canada." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 53.)

McLennan, J. C., Young, J. F. T. and Ireton, H. J. C.—"On the Extreme Ultra-violet Spectra of Magnesium and Slenium." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 67.)

"On the Absorption Spectra of Thallium, Aluminium, Lead, Tin and Arsenic." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 7.)

Evans, E. and Elworthy, R. T.—"A Continuous Flow Apparatus for the Purification of Impure Helium Mixtures." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 37.)

Young, J. F. T. and Ireton, H. J. C.—"On the Optical Transparency of Certain Specimens of Fluorite." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 15.)

Elworthy, R. T. and Murray, V. F.—"The Permeability of Balloon Fabrics to Hydrogen and Helium." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 37.)

Murray, V. F.—"The Estimation of the Helium Content of Mixtures of Gases by the use of a Katharometer." (Proc. Roy. Soc. Can., Vol. XIII, Sec. III, p. 27.)

McLennan, J. C., Ainslie, D. S. and Fuller, D. S.—"Vacuum Arc Spectra of elements in the Extreme Ultra-violet." (Proc. Roy. Soc. A., Vol. 95, 1919, p. 316.)

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McTaggart, H. A. and Edwards E.—"Composition of the Vapour and Liquid Phases of the System Mathane-Nitrogen." (Proc. Roy. Soc Can., Vol. XIII, Sec. III, p. 57, 1919.)

Satterly, J.—"A Simple apparatus for illustrating the Aberration of Light." (Journal Roy. Astronomical Society of Canada, Vol. XIV, April, 1920.)

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With Burton, E. F.—"On the Combustibility of mixtures of Hydrogen and Helium." (Trans. Roy. Soc. of Canada, Vol. XIII, 1919.)

With Patterson, J.—"On the Latent Heats of Methane and Ethane." (Trans. Roy. Soc. Canada, Vol. XIII, 1919.)

"On a curious effect observed when Nitrogen is dissolved in the condensate obtained at liquid air temperature from Natural Gas." (Trans. Roy. Soc. Canada, Vol. XIII, 1919.)

With McLennan, J. C. and Associates.—"Report on some sources of Helium in the British Empire." (Bulletin No. 31, Mines Branch, Department of Mines, Canada.)

Department of Physiology.

Kilborn, L. G., Hartman, F. A., and Blatz, W. E.—"Studies in the Regeneration of Denervated Mammalian Muscle. I. Volume Changes and Temperature Changes." (Jo. of Physiol., Vol. LIII, Nos. 1 and 2, Sept. 5th, 1919.)

"Studies in the Regeneration of Denervated Mammalian Muscle, II. Effect of Massage." (Jo. of Physiol., Vol. LIII, Nos. 1 and 2, Sept. 5th, 1919.)

Macleod, J. J. R.—"Behaviour of Respiration after Decerebration in the Cat." (Trans. Royal Soc. of Canada, Section V, 1919.)

"Some Recent Work in the Control of the Respiratory Centre." (Journal of Lab. and Clin. Med., Vol. V, No. 1, October, 1919.)

"The Spontaneous Development of an Acidosis Condition in Decerebrate Cats." (Univ. Tor. Studies, Physiol. Sec. No. 22.)

"The Problem of Broadening the Medical Course." (University of Toronto Monthly.)

"The Functional Pathology of Surgical Shock." (Jo. Lab. and Clin. Med., Vol. V, No. 4, January, 1920.)

"The Science of Ventilation and Open Air Treatment." (Jo. Lab. and Clin. Med., March, 1920.)

"On Ventilation." (Public Health Journal, Toronto, March, 1920.)

"The Therapeutic Value of Oxygen." (Jo. of Lab. and Clin. Med., May, 1920.)

"Air, Good, Bad and Indifferent." (Jour. of the Outdoor Life, May, 1920.)

"Physiology and Biochemistry in Modern Medicine." 2nd ed.

With Lang, R. S.—"Observations on the Reducing Substance in the Circulating Fluids of Certain Invertebrates and Fishes." (Quart. Jo. of Exp. Physiol.)

With Kilborn, L. G.—"Observations on the Glycogen Content of Certain Invertebrates and Fishes." (Quart. Jo. Exp. Physiol.)

Redfield, A. C., and Bright, E.M.—"The Relative Physiological Effects of B- and X-rays upon the Egg of Nereis." (Journ. Gen. Physiol., 1919, Vol. II, No. 1, pp. 25-29.)

"The Relative Physiological Effects of B-rays of Different Velocities." (Jour. Gen. Physiol., 1919, Vol. II, No. 1, pp. 31-47.)

Department of Political Economy.

Black, T. H.—"Jus and Lex in the Development of Roman Law." (Juridical Review, Edinburgh, July, 1919.)

Falconbridge, J. D.—"Written Promise under Section 90 of the Bank Act." (46 Dominion Law Reports, 311, June, 1919.)

"Guarantees and the Statute of Frauds." 68 University of Pennsylvania Law Review, pp. 1-19, 137-156, November, 1919, January, 1920; 40 Canadian Law Times, pp. 197-215, 304-313, 388-398, March-May, 1920.)

Jackman, W. T.—"The Canadian Railway Situation and the National Debt of the Dominion." (Economic World (N.Y.), May 17th, 1919.)
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Jackson, G. E.—"Unemployment in Eastern Canada." (Economic Journal, March, 1920.)
MacIver, R. M.—"Labour in the Changing World." (E. P. Dutton Co., 1919.)

Department of Spanish.

Buchanan, M. A.—"Lope de Vega's Amar Sin Saber a quién." (H. Holt & Co., New York, 1920.)
Pijoan, J.—Las pintures Murals catalanes, 4th fascicule." (Institut d'Estudes catalans.)

FACULTY OF MEDICINE.

Department of Anatomy.

McMurrich, J. P.—"The Development of the Human Body." (Sixth edition, revised and enlarged. Blakistons, Philadelphia.)
Watt, James C.—"Symmetrical Bilateral Dystopia of the Kidneys in a Human Subject, with Outward Rotation of the Hilus, Multiple Arteries and Veins and a Persistent Posterior Cardinal Vein." (Anatomical Record, 1920.)

Department of Gynaecology and Obstetrics.

Gallie, J. G.—"Antenatal Work and Stillbirths."
"The Role of the Prenatal Clinic."
With Scott, Dr. W. A.—"The Induction of Labour with Pituitary Extract."
Lailey, W. W.—"A New Method of Diagnosis in Gonorrhœa—Results in Women."
"Induction of Labour."
Marlow, J. W.—"Pelvic Inflammation." (Canadian Medical Monthly, March, 1920.)
"Rupture of the Gall Bladder." (Canadian Medical Monthly, May, 1920.)
"Review of the Forces." (Ontario Medical Association, May, 1920.)

Department of Hygiene.

Fitzgerald, J. G.—"Tetanus." (Nelson's Loose-Leaf System of Medicine, May, 1920.)
With Robertson, D. E.—"Diphtheric Wound Infections." (Journal American Medical Association, July 12, 1919, Vol. 73, p. 131.)
Fitzgerald, J. G.—"Preparation of Smallpox Vaccine." (Public Health Journal, January, 1920, Vol. XI, No. 1, p. 585.)
"Peace-Time Programme of the Red Cross Society." (Public Health Journal, April, 1920, Vol. XI, p. 149.

Caulfeild, A. H., and Fraser, D. T.—"Certain Bacteriological and Serological Aspects of Epidemic Influenza." (Canadian Medical Association Journal, Vol. X, May, 1920.)

Department of Medicine.

Brown, Alan.—"Child Health." (Canadian Public Health Assoc. Journal.)
"Toronto as a Pediatric Centre." (Dominion Medical Monthly.)
"Effect of Intravenous Injections of Calcium in Tetany and Influence of Cod Liver Oil and Phosphorus on the Retention of Calcium in the Blood." (American Journal, Diseases of Children.)

Elliott, J. H.—"A Sketch of Jenner and His Work." (Canadian Journal of Medicine and Surgery, Vol. XLVII, No. 2, February, 1920.)
"Diseases of the Respiratory System as Medical Problems in Rehabilitation." (Transactions of the 19th Annual Meeting, the Canadian Association for the Prevention of Tuberculosis, Ottawa, October 9th, 1919.)
"Bronchiectasis—A Review of Forty Cases." (Transactions, American Climatological and Clinical Association. 36th Annual Meeting, Atlantic City, June, 1919.)

Gwyn, N. B.—"Wounds of the Chest." (Jour. of the Can. Med. Ass'n.)
"Notes from the Service for Wounds of the Chest." (Jour. of the Can. Med. Ass'n.)
"Infectious Jaundice." (Osler Memorial Volumes.)
"On the Diagnosis of Variola." (Journal of the Can. Med. Ass'n.)
"The Early Influences Bearing on a Great Life. Sir William Osler."
"The Boyhood of Sir William Osler."
"Epidemiology and Diagnosis of Encephalitis." (Academy of Medicine.)
"Peri-nephric Abscess." (Academy of Medicine.)
"Clinical Side of Influenza and Empyema." (Ontario Med. Assoc., May 28th.)
"Encephalitis Lethargica." (Can. Med. Ass'n, Vancouver, June 25th.)
"Influenza Empyema." (Can. Med. Ass'n, Vancouver, June 25th.)
"Infectious Jaundice." (Can. Med. Ass'n, Vancouver, June 25th.)
"The Dicharge of the Typhoid Patient." (Can. Med. Ass'n, Vancouver, June 25th.)

Keith, N. M.—"Shock—Some Recent Advances in Its Physiology and Therapy." (Canadian Medical Monthly, Toronto, Vol. IV, 1920, No. 6, June.)

Pirie, G. R.—"Hyper-Adrevalism in Relation to Pyloris Hypertrophy." (Lancet, 1919.)
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Strathy, G. S.—"Report of Fifty-eight Cases of Delayed Arsenical Poisoning Following the Administration of '606' Preparations." (Canadian Medical Association Journal, April 1920, and The Lancet (London), April 10th, 1920.)

Department of Oto-Laryngology.

Dickie, J. K. M.—"Review of Endoscopy." (Edin. Med. Journal, July, 1919.)
"The Minute Anatomy of the Membranous Labyrinth." (Journal of Laryngology, March, 1920.)
"A Case of Chronic Middle Ear Suppuration, Cholesteatoma, etc." (Jour-

nal of Laryngology, March, 1920), (Canadian Med. Ass'n Journal, March, 1920.)

"Revision of Section on the Ear." (Gray's Anatomy, English Edition.)

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"Numerous Abstracts of French, German and Italian Papers." (Journal of Laryngology and Review of Neurology.)

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"Sir Victor Horsley—A Review of His Life and Work." (The Dominion Medical Monthly.)

"A Method of Procedure in the Treatment of the Mastoid Autrum in Acute Middle Ear Suppuration."

Wishart, D. J. Gibb.—"Indications For and Against Tonsillectomy." (Canadian Medical Monthly, April, 1920.)

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Bruce, H. A.—"Politics and the C.A.M.C." (June, 1919.)

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"The Lengthening of Amputation Stumps." (The Lancet, August 16th, 1919.)

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Gilmour, C. H.—"Cranioplasty." (Canadian Medical Assoc. Journal, September, 1919.)

"The Influence of the War on Surgical Treatment." (The Canadian Journal of Medicine and Surgery, April, 1920.)

Hair, C. H.—"Genito-Urinary Infections."

Primrose, A.—"Cranioplasty. The Value of a Graft of Bone, Cartilage or Fascia in the Closure of Cranial Defects Caused by Wounds in War—A Study of the Results Obtained in a Series of Forty-two Operations." (Annals of Surgery for July, 1919.)

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Rudolf, R. D.—"A Case of Complete Loss of Sensation." (Lancet, November, 1918.)
"Trench Fever Cachexia." (Lancet, December, 1918.)
"A case of Valvular Disease of the Heart Showing Unusual Powers of Physical Endurance." (Lancet, January, 1919.)
"The Diagnosis and Nomenclature of Disease." (Brit. Med. Jour., May, 1919.)
"Prognosis in Cardio-Vascular Disease." (Brit. Med. Association Report, 1919.)
"Subacute Trench Fever." (Lancet, May 17th, 1919.)
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"Trench Fever." (Medical Record, September, 1919.)
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"The Causation of Headache." (Canadian Journal of Medicine and Surgery, March, 1920.)
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With Dr. Cole.—"The Influenza Epidemic at Bramshott." (Brit. Med. Journal, November, 1918.)

FACULTY OF APPLIED SCIENCE.

Department of Applied Mechanics.

Young, C. R.—"Provisional Working Stresses for Steel Columns." (Canadian Engineer, January 29th, 1920.)

DEPARTMENT OF MINING ENGINEERING.

King, J. T.—"New and Rapid Apparatus for Electro Chemical Analyses." Chemical and Metallurgical Engineering, Vol. 21, No. 1, July, 1919); (School of Engineering Research Bulletin, No. 1, 1919.)

DEPARTMENT OF SURVEYING AND GEODESY.

Stewart, L. B.—"The New Navigation." (Journal of the Royal Astronomical Society, September, 1919.)

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Howe, C. D.—"The Forest Resources of Canada." (Read before the Royal Canadian Institute, March 6th, 1920, and published in Canadian Forestry Journal, April, 1920, and Canada Lumberman, April 15th, 1920.)

FACULTY OF MUSIC.

Ham, Albert.—"The Rudiments of Music and Elementary Harmony." (Novello & Co., London.)
Mouré, F. A.—"Some Points Regarding Organ Construction." (Journal of the Canadian Guild of Organists.)

SUPERINTENDENT'S REPORT

Buildings.

This Department now has under its supervision a total of twenty-eight buildings.

Since 1915 increases in appropriations for building maintenance have been much less than the increases in labour and material, with the result that only the most necessary repairs have been attended to, and increased appropriations have been requested for the year 1920-21, in an attempt to bring the buildings back to their pre-war state of repair.

During the year the new building to house the Departments of Electrical Engineering and Applied Mechanics, was started, and it is hoped that, in part at least, it will be ready for the opening of the fall term in 1920.

The new building for the University Press and Students' Book Department was started June 7th, 1920, and it is fully expected that it will be ready for occupation for the opening of the academic year.

Both these buildings are being erected under the supervision of this office, and the Superintendent's Department has been awarded contracts for heating, plumbing, wiring, etc., to the amount of approximately $87,000 in connection with these buildings.

The following buildings have been remodelled by this Department:—

No. 1 Queen's Park, for the Department of Medicine.

No. 71 St. George Street, for the Department of Political Science.

No. 92 and No. 94 St. George Street, for use as Women's Residences.

Grounds.

The repairs made to the front lawn have been completed and the ground south of Hart House has been regraded and seeded. The back campus is in a very bad state of repair and, if it is possible to free this ground from athletic uses, should be treated as the front lawn has been.

The continued erection of new buildings makes the keeping of the grounds a difficult task. A great number of trees on the University grounds are dying and have to be removed. It is hoped, with the co-operation of the Department of Botany, to inaugurate replanting so that this feature may be maintained.

Central Plant.

With the addition of new buildings erected this year, a further tax will be put on the already fully loaded Central Plant, but the Board have approved of certain alterations which, it is hoped, with the use, as an auxiliary, of the experimental plant in the Thermodynamics Building, will enable us to carry on until construction costs are lower than at present.

The fuel situation is becoming increasingly difficult. Fuel is not only difficult to obtain but is high in price and often of indifferent quality. Every effort is being made to reduce heat losses both in building operation and in transmission.

Comparative tables showing the operation of the Central Plant and the distribution of charges for the years 1918-19 and 1919-20 are appended.

A. D. LePan,

Superintendent.

COMPARATIVE STATEMENT OF DISTRIBUTION OF COST OF OPERATING POWER HOUSE

Buildings.	1918-19		1919-20		1918-19		1919-20	
	Square ft. of radiation in buildings.	Percentage charge.	Square ft. of radiation in buildings.	Percentage charge.	Light.	Heat.	Light.	Heat.
					$ c.	$ c.	$ c.	$ c.
Main	12,952	8.676	13,664	7.197	373 06	6,229 60	250 52	5,317 36
Hart House	18,861	6.343	31,134	12.376	350 00	4,554 45	2,595 42	9,143 76
Library	10,865	4.581	10,865	4.228	44 80	3,170 28	135 32	3,004 77
Univ. Press	.....	.....	.....	.....	300 00	80 00	300 00	80 00
Stu. Bk. Dept	.....	.....	.....	.....	2 10	39 00	2 10	39 00
Medical	7,498	3.949	7,722	4.413	809 30	2,835 49	697 68	3,260 46
Biological	8,271	3.312	8,271	3.360	95 82	2,378 11	99 28	2,482 47
Engineering	9,453	3.730	9,453	4.242	313 92	2,678 24	456 66	3,134 12
Electrical	.....	.....	.....	.....	437 10	.....	618 34	.....
Thermodynamics	5,236	1.915	5,236	2.296	70 50	1,375 02	77 14	1,696 35
Observatory	674	.287	674	.255	15 00	206 07	15 00	188 40
Mining	14,520	7.258	14,536	6.762	596 62	5,211 44	924 26	4,995 97
Furnace	.....	.....	.....	.....	120 66	.....	92 16	.....
Milling	.....	.....	.....	.....	26 20	.....	61 00	.....
Chemical	6,635	3.296	6,795	3.057	107 60	2,366 62	135 70	2,258 60
Physics	20,648	6.202	20,648	7.537	725 28	4,453 20	1,027 62	5,568 56
Convocation Hall	6,689	3.132	6,689	2.883	17 50	2,248 86	19 82	2,130 05
Men's Residences	9,336	5.777	9,336	4.908	314 96	4,148 04	422 78	3,626 18
Household Science	10,137	4.504	10,137	4.462	140 16	3,233 99	171 50	3,296 66
Museum	17,231	5.980	17,231	6.400	95 20	4,293 80	145 06	4,728 51
Wycliffe Coll	12,371	6.849	12,371	6.311	257 80	4,917 77	239 60	4,662 76
Victoria Coll	9,028	4.297	9,028	8.657	117 42	3,085 36	158 32	6,396 05
Burwash Hall	8,377	5.726	8,377		341 62	4,111 42	518 28	
Burwash D. Hall	.....	.....	.....	.....	202 28	.....	116 02	.....
Victoria Coll. Lib	4,021	1.523	4,021	1.519	8 64	1,093 55	40 96	1,122 28
Annesley Hall	4,274	3.037	4,274	2.343	149 36	2,180 65	183 06	1,731 08
Knox College	18,157	9.626	15,402	6.794	332 20	6,911 73	399 04	5,019 61
Old Gymnasium	.....	.....	.....	.....	133 00	.....	104 36	.....
Political Science	.....	.....	.....	.....	.....	.....	10 96	.....
Univ. Col.Wom. Un	.....	.....	.....	.....	9 12	.....	14 24	.....
No. 4 Queen's Pk	.....	.....	.....	.....	65 00	.....	87 72	.....
Social Service Bldg	.....	.....	.....	.....	7 28	.....	6 86	.....
No. 184 College St	.....	.....	.....	.....	30 00	.....	89 44	.....
No. 100 Queen's Park	.....	.....	.....	.....	58 14	.....	21 82	.....
Grounds	.....	.....	.....	.....	250 00	.....	250 00	.....
Stadium	.....	.....	.....	.....	.....	.....	208 41	.....
I.S.C. Mining Bldg	.....	.....	.....	.....	.....	.....	122 40	.....
Totals	215,234	100.000	225,864	100.000	6,917 64	71,802 69	10,818 85	73,883 00

POWER HOUSE.—COAL.

	1918-19	1919-20
Maximum Daily Consumption	58 tons.	79 tons.
Maximum Weekly Consumption	392 "	462 "
Average Daily Consumption		
September-October	17 "	17 "
November	31 "	36 "
December	37 "	51 "
January	41 "	58 "
February	42 "	52 "
March	39 "	44 "
April	37 "	34 "
May	16 "	23 "
Total consumption	7933-1980 tons.	9359-0480 tons.

Total cost of operation	$78,720 33	$84,701 85
Load in square feet of radiation	215,234	225,864
Cost per square foot of radiation	36.574c.	37.501c.

NOTE.—In this distribution of cost no allowance is made for lighting and power, or for high pressure steam supplied.

TEMPERATURES.

	1918-19		1919-20	
October	51.4	4.8 above aver.	53.0	6.5 above aver.
November	42.0	6.0 " "	38.2	2.2 " "
December	31.3	5.1 " "	22.7	3.4 below "
January	29.3	7.4 " "	13.0	8.9 " "
February	28.3	6.1 " "	20.2	2.0 " "
March	33.8	5.1 " "	33.9	5.2 above "
April	42.5	1.4 " "	40.1	1.1 below "
May	55.2	2.8 " "	54.5	2.1 above "
Yearly Average		4.8 " "		.07 " "

General average of Temperatures taken from years 1840-1898.

AUDITOR'S REPORT.

TORONTO, 19TH OCTOBER, 1920.

To the Governors of the University of Toronto:

GENTLEMEN,—Herewith I present the Financial Statement of the University for the fiscal year ending 30th June, 1920, and beg to report that all the transactions of the year upon Revenue Account and Capital Account have been duly audited and approved of.

Yours faithfully,

(Signed) G. T. CLARKSON,

Auditor.

FINANCIAL STATEMENT

APPENDIX I.

BALANCE SHEET, 30TH JUNE, 1920.

Funds and Liabilities.

General Endowments Fund	Schedule 1	$6,110,411 66	
Specific Endowment Funds	" 2	204,445 68	
Retirement Fund	" 3	30,192 56	
Trust Funds	" 4*a*	143,296 85	
Equipment Funds	" 4*b*	115,377 96	
Annuity Debentures	" 4*c*	927,562 44	
Contingent Funds	" 5*a*	4,308 29	
Fees paid in advance		460 00	
			$7,536,055 44

Assets.

Site Lands, Buildings and Contents	Schedule 6	$5,897,077 44	
Unproductive Lands	" 7	57,067 42	
Leased Properties	" 8	637,734 53	
Investments, Cash and Accounts Receivable	" 9	930,878 69	
Superintendent's Stores	Appendix VI.	13,297 36	
			$7,536,055 44

SCHEDULE 1.

General Endowments Fund.

Additions for 1919-20:			
Receipts from Frontage Licenses:			
Simcoe Realty Co.		$7,166 66	
Convocation Hall Advance:			
Restoration from proceeds of Wild Lands Sales, fourteenth instalment		1,279 53	
Annuity Debentures:			
Portion of 1919-20 instalments reducing principal:			
Eleventh instalment, issue of July, 1909	$7.788 59		
Ninth instalment, issue of January, 1911	1,872 00		
Ninth instalment, issue of January, 1911	4,320 00		
Fifth instalment, issue of April, 1915	1,225 04		
		$15,205 63	
Central Power Plant:			
Repayment from Revenue Account, ninth instalment		20,208 00	
Increased valuation of University Park leases upon renewal:			
Lots 68 and 72	50,380 00		
Part Lot 22	7,900 00		
		58,280 00	
Valuation of south half Lot 17, 17,500 sq. feet at 40c. per sq. foot upon transfer to Site Lands account	7,000 00		
Less hitherto carried in Leased Lands	3,000 00		
		4,000 00	
Building No. 6 Queen's Park, further payment upon purchase		461 54	
Building No. 100 Queen's Park, second of ten instalments paid on purchase		720 00	
Building No. 8 Queen's Park, fifth of ten instalments paid on purchase		750 00	
Building No. 184 College Street, fourth of ten instalments paid on purchase		500 00	
Belleville lots, increased valuation on sale at $2,000, hitherto carried at $1,183		817 00	
Library proper:			
Additions for year, less depreciation (Schedule 6)		2,694 99	
			$112,083 35

Contra.

Amount of account hitherto carried for No. 8 University Crescent (house demolished to make room for University Press)	$14,842 75		
Less valuation of land at 40c. per sq. foot (29,620 feet)	11,848 00		
		2,994 75	
Amount of account for Lot 23, hitherto carried in Leased Lands	13,000 00		
Less valuation as above upon transfer for use of Botanical Dept. (28,655 feet)	11,462 00	1,538 00	
Amounts written off			4,532 75
			107,550 60
Fund of 30th June, 1919			6,002,861 06
Fund of 30th June, 1920			$6,110,411 66

SCHEDULE 2.

Specific Endowment Funds (Scholarships, Prizes, Etc.).

Blake Matriculation	$30,328 72
Ellen Mickle Fellowship	26,553 93
Charles Mickle Fellowship	26,553 92
Mackenzie Memorial	18,259 60
McCharles Bequest	12,395 46
James H. Richardson Research Fellowship	10,000 00
Starr Bequest	6,316 09
Pearson Kirkman Marfleet Lectureship	6,300 00
George Brown, Medical Science	5,391 72
Young Memorial	4,185 25
Blake, Science and Moderns	3,750 00
Fulton Bequest	3,351 30
George A. Peters Scholarship	3,100 00
Porter, University Schools	5,000 00
Mary Mulock, Classics	2,838 74
Gibson Matriculation	2,685 00
A. A. A. S. Scholarship, Physics	2,350 00
John Macdonald, Philosophy	2,080 00
All Souls Historical Essay Prize	2,100 00
Moss, Classics	2,000 00
William Mulock, Classics and Mathematics	2,000 00
Daniel Wilson, Natural Science	2,000 00
Sundry Graduate Fellowships	291 00
Bankers', Political Science	1,200 00
George Brown, Modern Languages	1,128 34
Balmer, Science	1,110 00
Quebec Bonne Entente Prize	1,050 00
G. R. R. Cockburn, Greek	1,050 00
Booth, University Schools	1,015 00
William Ramsay, Political Economy	1,009 42
Julius Rossin, German	1,000 00
Prince of Wales, General Proficiency	950 00
Anna Howe Reeve Prize	650 00
Chappell Prize	569 28
Flavelle Travelling Fellowship	1,000 00
Lyle Medal	392 55
William Ramsay, Physics	1,050 00
Jardine Memorial Prize	100 00
John McCrae Scholarship	10,557 36
Squair French Prose Prize	270 00
R. A. Reeve Scholarship	250 00
Boiler Inspection and Insurance Company Scholarship	130 00

Specific Endowment Funds (Scholarships, Prizes, etc.).—Continued.

Board of Trade, Commerce and Finance	$83 00	
Reading Camp Association Prize	50 00	
Ledger balances on 30 June, 1920		$204,445 68
Return of 30 June, 1919	$188,648 15	
Interest written to endowments	5,568 44	
Additions to funds during year (including income from bonds)	18,883 23	
	213,099 82	
Scholarship expenditures	8,654 14	
Return of 30 June, 1920		$204,445 68

SCHEDULE 3.

Retirement Fund, Beneficiaries, 30 June, 1920.

W. Lash Miller	$9,897 87	
T. L. Walker	8,669 42	
W. A. Parks	4,384 95	
J. W. Bain	3,322 56	
H. W. Price	2,804 81	
J. Christie	1,112 95	
		$30,192 56
Fund of 30 June, 1919	$28,305 60	
Contributions, 1919-20	2,302 50	
Interest	268 60	
Interest from War Loan Bonds	1,188 00	
	$32,064 70	
Less withdrawal: E. M. Walker	1,872 14	
Return of 30 June, 1920		$30,192 56

SCHEDULE 4*a*.

Trust Funds.

Eaton Endowment	$32,139 95	
King Alfred Millenary Fund (Library)	12,188 98	
Phillips Stewart Bequest (Library)	1,676 54	
John Squair French Library Fund	1,214 50	
Alexander Edwin Hamilton Library Fund	886 02	
University Studies	4,922 20	
E. C. Walker Bequest (Residences)	28,419 08	
University Base Hospital Fund	200 00	
Fulford Estate Donation (Base Hospital)	1,943 26	
Massey Treble Bequest, Household Science	3,910 91	
Mary A. Simpson Bequest (not allocated)	1,451 31	
R. A. Reeve Bequests (not allocated)	4,000 00	
Medical Research Fund	20,587 87	
Dental Research Fund	700 97	
Massey Foundation	16,883 35	
Ontario Archæology Special Fund	485 00	
McCormick Fund, Social Service Department	1,249 20	
Microscopes Fund, Pathology	1,300 00	
Special Investigations Fund, Pathology	992 50	
J. C. McLennan	1,000 00	
John Langton Memorial	30 00	
Women's Residence	50 00	
Caput Fines	1,150 21	
Sundry Security Deposits:		
Residences	2,590 00	
Summer Session	1,230 00	
Keys	95 00	
R. J. Hamilton	2,000 00	
		$143,296 85

Trust Funds.—Continued.

Return of 30 June, 1919	$114,695 62	
Interest appropriations	2,812 38	
Receipts:		
Eaton Endowment	50,000 00	
Massey Foundation	22,137 00	
Massey Treble Bequest	4,750 00	
Reeve Bequest	2,000 00	
University Base Hospital	9,699 15	
A. E. Hamilton Library Fund	48 00	
University Studies	1,075 10	
Special Investigations Fund, Pathology	1,000 00	
Microscopes Fund, Pathology	2,400 00	
Dental Research Fund	1,500 00	
J. C. McLennan	1,000 00	
Women's Residence	50 00	
Residence Deposits	2,240 00	
Summer Session Deposits	1,270 00	
Key Deposits	90 00	
Caput Fines	1,193 50	
		$217,960 75
Expenditures:		
Eaton Endowment	$17,860 05	
Massey Foundation	5,253 65	
Massey Treble Bequest	3,592 85	
King Alfred Fund	116 59	
Phillips Stewart Bequest	35 84	
Hamilton Library Fund	41 98	
University Studies	39 22	
University Base Hospital	37,165 05	
Medical Research Fund	60 00	
Dental Research Fund	1,459 01	
Physiotherapy Research Fund	964 72	
Investigations Fund, Pathology	1,200 00	
Microscopes Fund, Pathology	3,500 00	
McCormick Fund	362 65	
University Schools Memorial	844 00	
Residence Deposits	2,020 00	
Summer Session Deposits	40 00	
Key Deposits	65 00	
Caput Fines	43 29	
		74,663 90
Return of 30 June, 1920		$143,296 85

SCHEDULE 4*b*.

Equipment Funds.

University Press Surplus Account:			
Balance of 30 June, 1919		$16,084 98	
Net addition for year 1919-20 as per Appendix IV		187 31	
Balance on 30 June, 1920		$16,272 29	
Less outstanding on Publications Account	$511 44		
And expenditure on new building for Press	1,755 95	2,267 39	
			$14,004 90
Connaught Antitoxin Laboratories:			
Balance on 30 June, 1920, at credit of the following accounts as per Appendix V:			
Connaught Antitoxin Surplus Account		$2,447 10	
Connaught Antitoxin Research Division, Operating		1,299 35	
Connaught Antitoxin Research Fund		100,000 00	
			$103,746 45

Equipment Funds.—Continued.

Convocation Hall Organ Fund:		
Balance on 30 June, 1919	$1,381 21	
Surplus music fees transferred	970 70	
	$2,351 91	
Expenses of recitals and upkeep, 1919-20	269 80	
		2,082 11
		$119,833 46
Less Anatomical Building Construction Account:		
Preliminary expenses re plans and tenders		4,455 50
		$115,377 96

SCHEDULE 4*c*.

Annuity Debentures.

Issue of July, 1909, $500,000, repayable in forty equal annual amounts of $25,260 each.	
Value as on 30 June, 1920, of the (twenty-nine) outstanding instalments	$429,008 48
Issue of January, 1911, under 1 George V, Cap. 80, for construction of Pathological Building, $130,000, repayable in forty equal annual amounts of $6,568 each.	
Value as on 30 June, 1920, of (thirty-one) outstanding instalments	115,524 00
Accrued on 30 June, 1920, of tenth payment and charged to Revenue, 1919-20	3,284 00
Issue of January, 1911, under 1 George V, Cap. 80, as a grant towards construction of Toronto General Hospital, $300,000, repayable in forty equal annual instalments of $15,157 each.	
Value as on 30 June, 1920, of the (thirty-one) outstanding instalments	266,593 00
Accrued on 30 June, 1920, of tenth payment and charged to Revenue, 1919-20	7,578 50
Issue of April, 1915, under R.S.O. 1914, Cap. 279, to provide for the payment of $100,000 to the Hart A. Massey Estate towards the Gymnasium portion of Hart House, $110,000, repayable in forty equal annual instalments of $5,975 each.	
Value as on 30 June, 1920, of the (thirty-five) outstanding instalments	104,329 66
Accrued on 30 June, 1920, of sixth payment and charged to Revenue, 1919-20	1,244 80
	$927,562 44

SCHEDULE 5*a*.

Contingent Funds.

Contingent Fund (Investment Reserve):		
Fund as per last report		$22,603 15
Special Grant received from Provincial Government for 1919-20	$400,000 00	
Balance on hand from previous special grants	44,175 42	
	$444,175 42	
Deficit upon Revenue Account, 1919-20, as per Schedule 5*b*	453,486 36	
Shortage yet to be met		9,310 94
		$13,292 21

Contingent Funds.—Continued.

Sundry Ledger Balances (items in suspense):			
Fire Premiums paid in advance	$9,467 26		
Argyll House, advance to Committee	500 00		
		9,967 26	
Less Credits:			
Contingent repairs (Military)	$230 00		
Hart House	753 34		
		983 34	
			8,983 92
			$4,308 29

SCHEDULE 5*b*.

Revenue, 1919-20.

Receipts.

		Estimate.	Actual.
Legislative Grant, University Act, 1906		$500,000 00	$500,000 00
Legislative Grant, 60 Vict., Cap. 59		7,000 00	7,000 00
Grant by Provincial Government on account of Faculty of Education (inclusive of $9,000 due, carried in Accounts Receivable)		15,000 00	15,000 00
Grant by Provincial Government for Special Course in Household Science (due and carried in Accounts Receivable)		4,500 00	5,400 00
Fees, University and College, as detailed in Appendix II		250,000 00	382,559 15
Interest:			
On Purchase Moneys		1,700 00	1,751 17
On Loans		1,800 00	724 35
On Debentures		9,600 00	9,962 55
On War Loan Bonds		11,000 00	11,963 40
On Bank Balances		2,350 00	574 06
Rentals:			
University Park ground leases		17,000 00	18,622 37
City of Toronto payment		6,000 00	6,000 00
Business properties		6,600 00	7,688 59
Sundry Houses, etc.		3,950 00	4,939 67
Sundry Land Earnings		.....	282 00
Men's Residence Dues		14,000 00	15,210 65
Women's Residence Dues		26,000 00	24,159 15
University College Women's Union:			
Membership fees		1,560 00	1,654 00
Receipts from rooms and meals		13,050 00	15,836 66
Central Power Plant Receipts:			
Wycliffe, Victoria and Knox Colleges	$25,824 20		
Royal Ontario Museum	4,873 57		
Sundry Accounts	4,123 49		
		35,000 00	34,821 26
Casual Revenue		.....	4,370 59
		$926,100 00	$1,068,519 62

Expenditures.

Total as per Appendix III	$1,466,357 00	$1,509,311 42
Interest written to Scholarship and other Funds	7,500 00	11,705 64
Interest on bank overdraft	.....	988 92
	$1,473,857 00	$1,522,005 98
Receipts as above	926,100 00	1,068,519 62
Expenditure in excess of receipts carried to Schedule 5*a*	$547,757 00	$453,486 36

SCHEDULE 6.

Site Lands, Buildings and Contents.

Site Lands:		
2,819,195 sq. feet at forty cents per foot	$1,127,678 00	
192,483 sq. feet at cost price	167,048 00	
3,011,678 sq. feet.		$1,294,726 00
Buildings:		
Household Science building	$455,000 00	
Main building	450,000 00	
Chemistry and Mining, with adjacent building	384,736 89	
Physics building	363,945 85	
Library building	327,425 50	
Convocation Hall and Examination Wing	214,866 22	
Education building	184,383 47	
Education building annex	6,698 63	
Pathological building	169,694 38	
Medical building	165,000 00	
Biological building	129,745 30	
Thermodynamics building	119,017 21	
Chemical building	77,469 88	
Engineering building	50,000 00	
Electrical Engineering building	126,304 23	
Forestry building	30,101 65	
Botanical building	13,000 00	
Geodetic Observatory building	12,000 27	
Political Science building	11,933 26	
Social Service building	7,500 00	
No. 1 Queen's Park (Department of Medicine)	6,075 77	
Men's Residences	170,000 00	
Women's Residences	93,945 83	
University College Women's Union	13,521 18	
Argyll House	10,450 00	
Y. M. C. A. building	1 00	
	$3,592,816 52	
Less balances of purchase money yet due on Social Service building, 184 College Street and Argyll House	12,510 00	
		$3,580,306 52
Library	$222,842 47	
General Museum Specimens	1 00	
Convocation Hall Organ	19,603 11	
		$242,446 58
Departmental Equipment:		
1. Faculty of Arts:		
Physics	$29,250 00	
Chemistry	14,040 00	
Physiology	12,500 00	
Mineralogy	10,145 00	
Geology	7,505 00	
Biology	6,131 25	
Botany	5,500 00	
Psychology	2,700 00	
Astro-Physics	1,635 00	
Mechanics	750 00	
Mathematics	500 00	
2. Faculty of Medicine:		
Pathology	18,440 56	
Chemical Pathology	7,925 74	
Pharmacology	2,430 00	
Anatomy	1,340 00	

Site Lands, Buildings and Contents.—Continued.

3. Faculty of Applied Science:		
Electrical Engineering	$30,923 00	
Mining	16,270 00	
Surveying	12,980 00	
Architecture and Drawing	10,830 00	
Applied Chemistry	10,114 00	
Applied Mechanics	10,075 00	
Mechanical Engineering	10,000 00	
Physics and Photography	4,127 00	
4. Faculty of Household Science	19,000 00	
5. Faculty of Education	10,000 00	
		$255,111 55
Furniture and Furnishings:		
Men's Residences	$13,198 30	
Women's Residences	9,505 20	
University College Women's Union	950 00	
Education Building Annex	1,775 91	
General furniture, various buildings	11,938 00	
		$37,367 41
Athletic Field Stadium and equipment		$11,817 88
Gymnasium equipment		1,800 00
Dining Hall equipment		1 00
Printing Plant		1 00
Connaught Laboratories, Farm, buildings and equipment		75,000 00
Antitoxin Laboratory (Medical building)		1 00
Central Power Plant		397,898 50
Surveying Practice Camp, Lutterworth Township		600 00
Total valuation		$5,897,077 44
Return of 30 June, 1919	$5,659,387 51	
Additions thereto:		
Library Proper:		
Value of additions for 1919-20 as reported by the Librarian	$9,587 02	
Less depreciation at 3% on $229,734.50	6,892 03	
	$2,694 99	
Valuation of the following University Park lots now transferred to this account:		
Part Lot 2 (Mavor) 29,620 sq. ft.		
South half Lot 17 (Riordon) 17,500 sq. ft.		
Lot 23 (Nelles) 28,655 sq. ft.		
75,775 sq. feet at 40c	$30,310 00	
The following at cost:		
Land at 71 St. George Street, 14,850 sq. ft.	10,500 00	
Land at 92 St. George Street, 6,660 sq. ft.	6,750 00	
Land at 94 St. George Street, 10,890 sq. ft.	8,250 00	
Buildings:		
Electrical Engineering, Construction cost to 30 June	$126,304 23	
71 St. George Street (Political Science) $7,500 00		
Alterations 4,433 26		
	$11,933 26	
92 and 94 St. George St. (Women's Residence) $18,750 00		
Alterations, etc. 5,973 77		
	$24,723 77	
2 Surrey Place (Botany)	$13,000 00	
1 Queen's Park (Medicine)	6,075 77	
Argyll House, alterations, etc.	3,250 00	
Furnishings:		
Women's Residence, St. George Street	$1,712 78	
Instalments paid on balances due on purchase of buildings Nos. 8 Queen's Park, 184 College Street and Argyll House	1,970 00	
		$5,906,862 31

Site Lands, Buildings and Contents.—Continued.

Contra.

Women's Residences, Furniture, etc:		
Written off by application of credit from sales of Wild Lands set apart for Women's Residences	$784 87	
Athletic Field Stadium, etc.:		
Repayment by Athletic Association on account of principal due by them	9,000 00	
		9,784 87
Return of 30 June, 1920.		$5,897,077 44

SCHEDULE 7.

Unproductive Lands.

Vacant Land in Port Hope	$ 6,895 00	
Endowment Lands unsold in various townships	152 00	
U. C. C. Block on King Street	50,020 42	
		$57,067 42

Transactions, 1919-20.

Upper Canada College Block:		
Taxes paid *re* widening of Duncan Street	22 69	
Return of 30 June, 1919	58,227 73	
	58,250 42	
Less Belleville lots sold	1,183 00	
Return of 30 June, 1920		$57,067 42

SCHEDULE 8.

Leased Properties.

Victoria College Site	$1 00	
Knox College Site	4,714 40	
Wycliffe College Site	22,000 00	
Land leased to City of Toronto	120,000 00	
Park Land leased	381,106 00	
Toronto Business Properties	61,401 00	
Caradoc Farm	2,700 00	
		$591,922 40
House and land, 47 St. George Street	$10,172 95	
House and land, 69 St. George Street	20,000 00	
Building, No. 719 Spadina Avenue	4,000 00	
Building, No. 721 Spadina Avenue	4,023 51	
Building, No. 6 Queen's Park	3,157 83	
		41,354 29
Rentals accrued	$9,228 17	
Less paid in advance	6,270 33	
	2,957 84	
City of Toronto payment accrued	1,500 00	
		4,457 84
		$637,734 53
Return of 30 June, 1919	$651,635 05	
Further payment upon purchase of No. 6 Queen's Park	461 54	
Purchase of No. 2 Surrey Place	13,000 00	
Purchase of No. 71 St. George Street ($18,000, less paid last year $500)	17,500 00	
Addition to capitalized value upon renewal of leases, University Park:		
Lots 68 and 72 $50,380 00		
Part Lot 22 7,900 00		
	58,280 00	
		$740,876 59

Leased Properties.—Continued.

Contra.

Valuation attached to Lot 23 and South half Lot 17 (leases surrendered) transferred to Site Lands	$16,000 00	
Building No. 2 Surrey Place, transferred to use as Botanical building	13,000 00	
Property No. 71 St. George Street, transferred to use as Political Science Building	18,000 00	
Properties Nos. 92 and 94 St. George Street, transferred to use as Women's Residence	33,750 00	
Sundry adjustments *re do.*	294 81	
Valuation of No. 8 University Crescent, transferred for use of University Press	14,842 75	
Decrease in rentals outstanding	7.254 50	
		103,142 06
Return of 30 June, 1920		$637,734 53

SCHEDULE 9.

Investments, Cash and Accounts Receivable.

Debentures and Municipal Bonds	$229,331 82	
Interest accrued	3,663 86	
		$232,995 68
Loans secured by mortgages on real property	12,140 07	
Interest accrued	85 88	
		12.225 95
Unpaid purchase money upon land sales	27,650 00	
Interest accrued	421 41	
		28,071 41
Canadian War Loan and Province of Ontario Bonds	290,849 84	
Interest accrued	1,583 86	
		292,433 70
Home Bank of Canada shares		800 00
Dominion Power and Transmission Co. shares		2.000 00
Royal Ontario Museum Investment		251,002 80
Advances to Royal Ontario Museum:		
For share of salaries and expenses for the year 1919-20, payable by the Provincial Government	$22,473 48	
For Indian Group, to be repaid by Canadian National Exhibition	1,869 38	
For Museum Special Account, pending receipt of grant from Provincial Government	12,983 87	
		37,326 73
Balance of grants due by Provincial Government for 1919-20:		
Faculty of Education ($9,000, less amount on hand from superannuation deductions, $1,968.63)	7,031 37	
Household Science Special Course	5,400 00	
		12,431 37
Accounts Receivable:		
University Press	13,598 49	
Department of Photography	142 93	
Connaught Laboratories	8,506 74	
Miscellaneous labor and material	2,744 56	
		24.992 72
Central Power Plant:		
Victoria College Account:		
Share of operating expenses, 1919-20.... $10,266 05		
Interest, sinking fund and rental charges 3,218 72		
	13,484 77	
Wycliffe College Account:		
Share of operating expenses, 1919-20..... 4,902 36		
Interest, sinking fund and rental charges.. 543 12		
	5,445 48	

Investments, Cash and Accounts Receivable.—Continued.

Knox College Account:			
Share of operating expenses, 1919-20	$5,418 65		
Interest, sinking fund and rental charges	1,475 30		
		6,893 95	
Sundry items		338 02	
			26,162 22
Canadian Bank of Commerce, on deposit			10,436 11
			$930,878 69

Transactions, 1919-20.

Inwards.

Debentures redeemed	$23,621 47	
Mortgage loans repaid	681 28	
Purchase money collections	1,000 00	
Withdrawals from Canadian Bank of Commerce	2,035,885 45	
		$2,061,188 20

Outwards.

Land Sales	$2,000 00	
War Loan Investments	29,600 00	
Deposits in Canadian Bank of Commerce	1,947,064 38	
Increase in accrued revenue	13 59	
Increase in accounts outstanding	5,751 79	
Royal Ontario Museum Investment transferred to this Schedule	251,002 80	
		2,235,432 56
		174,244 36
Return of 30 June, 1919		756,634 33
Return of 30 June, 1920		$930,878 69

APPENDIX II.

Fees, 1919-20.

Balance brought forward from 1918-19		$324 00	
Total of fees collected, 1919-20		436,337 70	
			$436,661 70
Less deductions as follows:			
Sundry refunds during year		$7,791 80	
Paid to Hart House, share of fees		23,336 80	
Paid to Men's Students' Administrative Council, Council fees		5,885 20	
Paid to Women's Students' Administrative Council, Council fees		1,640 00	
Paid to Hospitals, fees payable from Students in Medicine:			
Toronto General	$5,740 00		
St. Michael's	1,179 95		
Sick Children's	1,173 30		
Western	678 30		
		8,771 55	
Transferred to Caput Fines		1,192 50	
Transferred to Microscopes Account		2,400 00	
Transferred to University College Women's Union		1,654 00	
Fees paid in advance for 1920-21		460 00	
			53,131 85
			$383,529 85
Carried to Organ Fund (Schedule 4*b*) surplus fees derived from Local Examinations in Music after payment of expenses			$970 70
Balance to Revenue Account (Schedule 5*b*)			382,559 15
			$383,529 85

Details of Fees Received, 1919-1920.

Subject.	1st year.	2nd year.	3rd year.	4th year.	5th year.	Miscellaneous.	Total.
I. Faculty of Arts:	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Tuition	17,977 00	9,403 00	8,214 00	4,674 00	.....	1,134 80	41,402 80
Dispensations (University College)	15 00	.....	10 00	.....	.....	.....	25 00
Dispensations (University)	15 00	5 00	15 00	.....	.....	.....	35 00
Honor Certificates	.....	1 00	2 00	7 00	.....	48 00	58 00
Matriculation	.....	.....	.....	.....	.....	1,465 40	1,465 40
Ad Eundem	.....	50 00	80 00	25 00	.....	.....	155 00
Examinations	8,030 50	6,083 00	4,542 50	3,125 00	.....	1,171 75	22,952 75
Degrees	.....	.....	.....	2,730 00	.....	10 00	2,740 00
Laboratory Supplies	506 00	546 00	873 00	741 00	.....	.....	2,666 00
Library	1,454 00	826 00	736 00	490 00	.....	6 00	3,512 00
Lecture Fees for Special Preparatory Courses	.....	.....	.....	.....	.....	5,679 00	5,679 00
Gymnasium, Women's	489 00	292 00	219 00	86 00	.....	8 00	1,094 00
Women's Union	540 00	362 00	324 00	203 00	.....	146 00	1,575 00
Penalties (University)	387 00	266 00	193 00	92 00	.....	16 00	954 00
Penalties (University College)	67 00	32 00	51 00	10 00	.....	22 00	182 00
Hart House and Men's Students' Council	4,569 00	2,220 00	2,040 00	1,155 00	.....	160 00	10,144 00
Women's Students' Council	546 00	368 00	316 00	258 00	.....	4 00	1,472 00
	34,595 50	20,454 00	17,615 50	13,576 00	.....	9,870 95	96,111 95
II. Faculty of Medicine:							
Tuition	51,176 00	29,997 00	23,245 00	17,428 00	9,735 00	4,285 00	135,866 00
Tuition, Summer Courses, 1919	.....	.....	1,320 00	320 00	480 00	.....	2,120 00
Honor Certificates	.....	.....	.....	.....	.....	13 00	13 00
Matriculation	206 00	.....	.....	.....	.....	.....	206 00
Ad Eundem	.....	210 00	50 00	.....	20 00	.....	280 00
Examinations	3,960 00	2,860 00	2,400 00	1,460 00	1,020 00	.....	11,700 00
Degrees	.....	.....	.....	.....	1,580 00	40 00	1,620 00
Laboratory Supplies	3,000 00	2,497 00	446 00	650 00	440 00	.....	7,033 00
Library	750 00	456 00	364 00	260 00	176 00	.....	2,006 00
Gymnasium (Women's)	.....	8 00	.....	.....	.....	.....	8 00
Women's Union	.....	20 00	20 00	.....	.....	36 00	76 00
Penalties	155 00	145 00	142 00	162 00	123 00	1 00	728 00
Hart House and Men's Students' Council	3,836 00	2,250 00	1,716 00	1,202 00	770 00	6 00	9,780 00
Women's Students' Council	50 00	46 00	26 00	24 00	14 00	.....	160 00
Microscopes	.....	.....	1,700 00	600 00	100 00	.....	2,400 00
Caput Fines	387 50	333 00	.....	.....	.....	.....	720 50
Special Course, Returned Soldiers, Khaki University	.....	.....	.....	.....	.....	200 00	200 00
	63,520 50	38,822 00	31,429 00	22,106 00	14,458 00	4,581 00	174,916 50

Details of Fees Received, 1919-1920.—Continued.

Subject.	1st year.	2nd year.	3rd year.	4th year.	5th year.	Miscellaneous.	Total.
III. Faculty of Applied Science:	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Tuition	35,813 00	16,895 00	14,864 00	10,078 00	.....	.....	77,650 00
Honor Certificates	.....	.....	.....	.....	.....	6 00	6 00
Matriculation	100 00	.....	.....	.....	.....	.....	100 00
Ad Eundem	.....	190 00	30 00	10 00	.....	.....	230 00
Examinations	4,009 00	2,130 00	1,620 00	980 00	.....	45 00	8,784 00
Degrees	.....	.....	.....	890 00	.....	160 00	1,050 00
Library	752 00	328 00	278 00	186 00	.....	.....	1,544 00
Gymnasium (Women's)	.....	.....	.....	4 00	.....	.....	4 00
Penalties	102 00	36 00	63 00	23 00	.....	.....	224 00
Hart House and Men's Students' Council	4,010 00	1,710 00	1,390 00	950 00	.....	.....	8,060 00
Women's Students' Council	.....	2 00	2 00	4 00	.....	.....	8 00
Caput Fines	302 00	117 00	42 00	12 00	.....	.....	473 00
	45,038 00	21,408 00	18,289 00	13,137 00	.....	211 00	98,133 00
IV. Faculty of Education:							
Tuition (Teachers in training)	.....	.....	.....	.....	.....	8,155 00	8,155 00
Registration for Degrees in Pedagogy	.....	.....	.....	.....	.....	60 00	60 00
Honor Certificates	.....	.....	.....	.....	.....	12 00	12 00
Examinations	.....	.....	.....	.....	.....	571 00	571 00
Degrees	.....	.....	.....	.....	.....	50 00	50 00
Gymnasium (Women's)	.....	.....	.....	.....	.....	40 00	40 00
Hart House and Men's Students Council	.....	.....	.....	.....	.....	1,180 00	1,180 00
	.....	.....	.....	.....	.....	10,068 00	10,068 00
Tuition, U. T. S.	.....	.....	.....	.....	.....	25,112 00	25,112 00
	.....	.....	.....	.....	.....	35,180 00	35,180 00
V. Faculty of Forestry:							
Tuition	1,117 00	734 00	334 00	120 00	162 00	20 00	2,487 00
Matriculation	5 00	.....	.....	.....	.....	.....	5 00
Ad Eundem	.....	10 00	.....	10 00	.....	.....	20 00
Examinations	190 00	190 00	80 00	20 00	30 00	.....	510 00
Degrees	.....	.....	.....	20 00	10 00	.....	30 00
Laboratory Supplies	150 00	116 00	52 00	16 00	12 00	.....	346 00
Library	40 00	30 00	14 00	4 00	6 00	.....	94 00
Penalties	10 00	4 00	.....	2 00	.....	.....	16 00
Hart House and Men's Students' Council	200 00	140 00	60 00	20 00	30 00	.....	450 00
	1,712 00	1,224 00	540 00	212 00	250 00	20 00	3,958 00

Details of Fees Received, 1919-1920.—Continued.

Subject.	1st year.	2nd year.	3rd year.	4th year.	5th year.	Miscellaneous.	Total.
VI. Faculty of Music: Mus. Bac.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Registration and Lecture fees ...	.....	.....	.....	.....	.....	115 00	115 00
Matriculation	.....	.....	.....	.....	.....	40 00	40 00
Examinations....	.....	.....	.....	.....	.....	111 00	111 00
	.....	.....	.....	.....	.....	266 00	266 00
Local:							
Examinations....	.....	.....	.....	.....	.....	1,699 00	1,699 00
Honor Certificates.	.....	.....	.....	.....	.....	515 25	515 25
	.....	.....	.....	.....	.....	2,480 25	2,480 25
VII. University Extension and Social Service:							
(a) University Extension Summer Session :							
Lecture fees ($566, of which $324 paid in 1918-19).	.....	.....	.....	.....	.....	242 00	242 00
Lecture Fees (in advance for 1920-21).....	.....	.....	.....	.....	.....	460 00	460 00
Correspondence Courses	.....	.....	.....	.....	.....	955 00	955 00
Teachers' Courses	.....	.....	.....	.....	.....	701 00	701 00
Special Tutorial Class (Wallace)	.....	.....	.....	.....	.....	138 00	138 00
Special Tutorial Class (Fairley).	.....	.....	.....	.....	.....	202 50	202 50
Special Class for Business Men (Jackson)..	.....	.....	.....	.....	.....	105 00	105 00
	.....	.....	.....	.....	.....	2,803 50	2,803 50
(b) Social Service:							
Lecture Fees.....	.....	.....	.....	.....	.....	3,285 00	3,285 00
Special Course, Employment Management ...	.....	.....	.....	.....	.....	615 00	615 00
Special Extension Course, Mental Hygiene.....	.....	.....	.....	.....	.....	197 50	197 50
Gymnasium (Women's).....	.....	.....	.....	.....	.....	4 00	4 00
Women's Union..	.....	.....	.....	.....	.....	3 00	3 00
Hart House and Men's Students' Council.....	.....	.....	.....	.....	.....	10 00	10 00
	.....	.....	.....	.....	.....	6,918 00	6,918 00

Details of Fees Received, 1919-1920.—Continued.

VIII. Departmental Fees.	Post Graduate Studies.	Law.	Dentistry.	Pharmacy.	Veterinary Science.	Agriculture.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Tuition	1,494 00				3,200 00		4,694 00
Honor Certificates			5 00				5 00
Matriculation		130 00	2,025 00	455 00	10 00		2,620 00
Registration	515 00						515 00
Ad Eundem			85 00				85 00
Examinations	710 00	190 00	4,215.00	1,092 00	155 00	610 00	6,972 00
Degrees	735 00	60 00	1,310 00	910 00	40 00	590 00	3,645 00
Library	6 00						6 00
Gymnasium (Women's)			32 00				32 00
Penalties		6 00					6 00
Hart House and Men's Students' Council	60 00						60 00
	3,520 00	386 00	7,672 00	2,457 00	3,405 00	1,200 00	18,640 00

Summary of Fees, 1919-20.

I. Faculty of Arts:		
First year	$34,595 50	
Second year	20,454 00	
Third year	17,615 50	
Fourth year	13,576 00	
Miscellaneous	9,870 95	
		$96,111 95
II. Faculty of Medicine:		
First year	$63,520 50	
Second year	38,822 00	
Third year	31,429 00	
Fourth year	22,106 00	
Fifth year	14,458 00	
Miscellaneous	4,581 00	
		174,916 50
III. Faculty of Applied Science:		
First year	$45,088 00	
Second year	21,408 00	
Third year	18,289 00	
Fourth year	13,137 00	
Miscellaneous	211 00	
		98,133 00
IV. Faculty of Education:		
Teachers in training	$10,068 00	
University Schools	25,112 00	
		35,180 00
V. Faculty of Forestry:		
First year	$1,712 00	
Second year	1,224 00	
Third year	540 00	
Fourth year	212 00	
Fifth and sixth years	250 00	
Miscellaneous	20 00	
		3,958 00

Summary of Fees. 1919-20.—Continued.

VI. Faculty of Music:		
Mus. Bac	$266 00	
Local	2,214 25	
		2,480 25
VII. University Extension and Social Service:		
Miscellaneous	$6,918 00	
		6,918 00
VIII. Departmental:		
Post Graduate Studies	$3,520 00	
Law	386 00	
Dentistry	7,672 00	
Pharmacy	2,457 00	
Veterinary Science	3,405 00	
Agriculture	1,200 00	
		18,640 00
		$436,337 70

Classification of Services.

Tuition and Lecture Fees:		
Arts	$41,402 80	
do Special Preparatory Courses	5,679 00	
Medicine	138,186 00	
Applied Science	77,650 00	
Education, Teachers in Training	8,155 00	
Education, University Schools	25,112 00	
Forestry	2,487 00	
Music	115 00	
University Extension and Social Service	6,901 00	
Departmental	4,694 00	
Dispensations	60 00	
Honour Certificates	609 25	
Registration	575 00	
Matriculation	4,436 40	
Ad Eundem	770 00	
Examinations	53,299 75	
Degrees	9,135 00	
Laboratory Supplies	10,045 00	
Library	7,162 00	
Gymnasium (Women's)	1,182 00	
Women's Union	1,654 00	
Penalties	2,110 00	
Hart House and Men's Students' Council	29,684 00	
Women's Students' Council	1,640 00	
Microscopes	2,400 00	
Caput Fines	1,193 50	
		$436,337 70

Recapitulation.

	Gross Receipts.	Refunds and other Deductions.	Net Amount.
University Fees proper	$136,303 90	$38,663 30	$97,640 60
University College Fees proper	41,427 80	1,248 00	40,179 80
Medicine	138,186 00	11,020 55	127,165 45
Applied Science	77,650 00	1,796 00	75,854 00
Education, including University Schools	33,267 00	215 00	33,052 00
Forestry	2,487 00	54 00	2,433 00
Music	115 00	.....	115 00
University Extension and Social Service	6,901 00	135 00	6,766 00
Balance brought forward from 1918-19	324 00	.....	324 00
	$436,661 70	$53,131 85	$383,529 85

APPENDIX III.

Revenue Expenditures, 1919-20.

	Appropriation.	Supplementary.	Unused.	Total.
1. Administration:				
1. Salaries	$94,300 00	$525 86		$94,825 86
2. Pensions & Ret. Allowances	15,050 00	400 00		15,450 00
3. President's Office	350 00	23 00		373 00
4. Bursar's Office	2,200 00	4,570 21		6,770 21
5. Registrar's Office	4,650 00	406 00		5,056 00
6. Superintendent's Office	750 00	1,232 71		1,982 71
7. Library	50,900 00		$17,124 03	33,775 97
8. Gymnasium and Students' Union, Hart House	8,200 00		248 68	7,951 32
9. Convocation Hall	2,525 00		51 39	2,473 61
10. Grounds	14,600 00	2,889 84		17,489 84
11. Examinations	12,250 00	5,455 78		17,705 78
12. Convocation Expenses	1,000 00	1,603 76		2,603 76
13. Reception to Societies	1,000 00	27 38		1,027 38
14. Telephones	3,800 00	1,342 01		5,142 01
15. Insurance	9,000 00	865 06		9,865 06
16. Advertising Expenses	1,300 00		380 85	919 15
17. Aid to Publications and Societies	1,350 00		450 00	900 00
18. University Studies	3,000 00	755 67		3,755 67
19. Law Costs	500 00	640 37		1,140 37
20. Travelling Expenses	1,650 00		445 72	1,204 28
21. Senate Elections	1,200 00		557 20	642 80
22. Roll of Service	2,700 00		566 42	2,133 58
23. Alumni Association	5,200 00	100 00		5,300 00
	$237,475 00	$20,837 65	$19.824 29	$238,488 36
II. Faculty of Arts:				
24. Salaries	$370.022 00	$4,512 08		$374,534 08
25. Retiring Allowances	.....	.....	.....	.....
26. Main Building	11,700 00	7,411 75		19,111 75
27. Biological Building and Department	9,635 00	1,784 92		11,419 92
28. Sub-Department of Botany	4,650 00	2,141 07		6,791 07
29. Biochemistry Department	5,500 00	635 58		6,135 58
30. Physiology Department	3,200 00	67 30		3,267 30
31. Chemical Building and Department	10,775 00	1,903 88		12,678 88
32. Sub-Department of Physical Chemistry	500 00	80 27		580 27
33. Physics Building and Department	11,700 00	2,697 35		14,397 35
34. Sub-Department of Astro-Physics	850 00		$47 59	802 41
35. Geological Department	400 00	457 29		857 29
36. Mineralogical Dept.	1,000 00		577 88	422 12
37. Philosophical and Psychological Department	550 00	215 36		765 36
38. Mathematical Department.	30 00		10 75	19 25
39. Sub-Dept. of Mechanics	400 00		235 83	164 17
40. Political Science Building and Department	2,650 00		804 78	1,845 22
41. History	75 00		19 18	55 82
42. Italian and Spanish	25 00	10		25 10
43. University College Departments	420 00		224 60	195 40
44. University College General Expenses	350 00		196 20	153 80
45. Trinity College Service	525 00	328 84		853 84
	$434,957 00	$22,235 79	$2,116 81	$455,075 98

Revenue Expenditures, 1919-20.—Continued.

	Appropriation.	Supplementary.	Unused.	Total.
III. Faculty of Medicine:				
46. Salaries	$87,060 00	.....	$16,381 34	$70,678 66
47. Retiring Allowances	.....	.....	.....	.....
48. Anatomy	2,750 00		371 84	2,378 16
49. Pathology and Bacteriology	2,260 00	$175 57	.....	2,435 57
50. Chemical Pathology	1,500 00	.....	70 34	1,429 66
51. Pharmacy and Pharmacology	650 00	224 43	.....	874 43
52. Medicine	.....	13,000 00	.....	13,000 00
53. Medicine, Maintenance of Building, 1 Queen's Park	.....	1,084 56	.....	1,084 56
54. Surgery	450 00	.....	147 09	302 91
55. Obstetrics and Gynæcology	300 00	.....	190 33	109 67
56. Ophthalmology	100 00		100 00	
57. Oto-Laryngology	200 00	58 84		258 84
58. Therapeutics	100 00	49		100 49
59. Hygiene	2,600 00		296 91	2,303 09
60. Medical Jurisprudence	.....	.....	.....	.....
61. Medical Building	6,025 00	881 70		6,906 70
62. Pathological Building	7,925 00	142 08	.....	8,067 08
63. General Expenses	2,100 00	606 23		2,706 23
64. Summer Session in Medicine	1,500 00		10 00	1,490 00
	$115,520 00	$16,173 90	$17,567 85	$114,126 05
IV. Faculty of Applied Science:				
65 Salaries	$147,000 00	$10,650 55		$157,650 55
66. Mining Building	6,350 00	782 63		7,132 63
67. Engineering Building	4,250 00	768 55		5,018 55
68. Old Y.M.C.A. Building		491 72		491 72
69. Thermodynamics Building.	1,925 00		$59 84	1,865 16
70. Geodetic Observatory Building	440 00		77 57	362 43
71. Electrical Engineering	4,650 00		60 99	4,589 01
72. Mechanical Engineering	2,000 00	314 94		2,314 94
73. Applied Mechanics	800 00	704 21		1,504 21
74. Mining Engineering	1,000 00	663 54		1,663 54
75. Metallurgical Engineering.	1,000 00		122 34	877 66
76. Ferro-Metallurgy	.....	.....	.....	.....
77. Surveying	11,110 00	317 04		11,427 04
78. Applied Chemistry	3,500 00	943 04		4,443 04
79. Electro-Chemistry	1,750 00	382 36		2,132 36
80. Architecture and Drawing.	800 00	1,149 00		1,949 00
81. Engineering Physics and Photography	1,850 00		859 76	990 24
82. General Expenses	1,200 00	1,634 09		2,834 09
	$189,625 00	$18,801 67	$1,180 50	$207,246 17
V. Faculty of Household Science:				
83. Salaries	$14,200 00		$200 00	$14,000 00
84. Household Science Building and Department	8,200 00	$425 21		8,625 21
	$22,400 00	$425 21	$200 00	$22,625 21
VI. Faculty of Education:				
85. Salaries	$89,740 00		$1,205 67	$88,534 33
86. Education Building and Department	22,600 00		53 64	22,546 36
	$112,340 00		$1,259 31	$111,080 69

Revenue Expenditures, 1919-20.—Continued.

	Appropriation.	Supplementary.	Unused.	Total.
VII. Faculty of Forestry:				
87. Salaries	$12,250 00		$1,000 00	$11,250 00
88. Forestry Building and Department	4,250 00		236 89	4,013 11
	$16,500 00		$1,236 89	$15,263 11
VIII. 89. Faculty of Music	$2,000 00		$231 35	$1,768 65
IX. University Extension and Social Service:				
90 University Extension	$10,000 00		$1,101 94	$8,898 06
91. Social Service Building and Department	6,950 00	$1,270 20		8,220 20
	$16,950 00	$1,270 20	$1,101 94	$17,118 26
X. Residences and Dining Hall:				
92. Men's Residences	$7,650 00		$456 59	$7,193 41
93. Women's Residences	29,600 00	$2,285 54		31,885 54
94. Dining Hall		4,179 23		4,179 23
95. University College Women's Union	17,052 00	3,519 56		20,571 56
	$54,302 00	$9,984 33	$456 59	$63,829 74
XI. 96. Royal Ontario Museum	$20,000 00	$2,473 49		$22,473 49
XII. 97. Central Light, Heat and Power Plant	$83,600 00	$1,080 95		$84,680 95
XIII. 98. Contingencies and Miscellaneous	$5,000 00	$5,699 31		$10,699 31
XIV. 99. Capital Account Charges	$75,688 00		$88 46	$75,599 54
XV. 100. Special Research	$75,000 00		$16,632 42	$58,367 58
XVI. 101. Special Courses for Returned Soldiers	$5,000 00	$5,868 33		$10,868 33

Recapitulation.

I. Administration	$237,475 00	$20,837 65	$19,824 29	$238,488 36
II. Faculty of Arts	434,957 00	22,235 79	2,116 81	455,075 98
III. Faculty of Medicine	115,520 00	16,173 90	17,567 85	114,126 05
IV. Faculty of Applied Science	189,625 00	18,801 67	1,180 50	207,246 17
V. Faculty of Household Science	22,400 00	425 21	200 00	22,625 21
VI. Faculty of Education	112,340 00		1,259 31	111,080 69
VII. Faculty of Forestry	16,500 00		1,236 89	15,263 11
VIII. Faculty of Music	2,000 00		231 35	1,768 65
IX. University Extension and Social Service	16,950 00	1,270 20	1,101 94	17,118 26
X. Residences and Dining Hall	54,302 00	9,984 33	456 59	63,829 74
XI. Royal Ontario Museum	20,000 00	2,473 49		22,473 49
XII. Central Light, Heat and Power Plant	83,600 00	1,080 95		84,680 95

Recapitulation.—Continued.

	Appropriation.	Supplementary.	Unused.	Total.
XIII. Contingencies and Miscellaneous	$5,000 00	$5,699 31		$10,699 31
XIV. Capital Account Charges	75,688 00		$88 46	75,599 54
XV. Special Research	75,000 00		16,632 42	58,367 58
XVI. Special Courses for Returned Soldiers	5,000 00	5,868 33		10,868 33
	$1,466,357 00	$104,850 83	$61,896 41	$1,509,311 42
		61,896 41		
		$42,954 42		
	42,954 42			
Total expenditure under appropriations	$1,509,311 42			

I. Administration.

1. *Salaries.*

President's Office.

Sir Robert Falconer, K.C.M.G., President, 12 mos. to 30 June	$10,000 00	
Miss A. W. Patterson, President's Secretary, 12 mos. to 30 June (paid also $200 as Secretary, Faculty of Music)	1,800 00	
		$11,800 00

Bursar's Office.

F. A. Mouré, Bursar, 12 mos. to 30 June (paid also $250 in Music)	$4,750 00	
C. E. Higginbottom, Accountant, 12 mos. to 30 June	2,000 00	
H. J. Bolitho, Fees Clerk, 12 mos. to 30 June	2,000 00	
Miss A. M. Gall, Secretarial Clerk, 12 mos. to 30 June	1,450 00	
J. P. Jones, Clerk and Bookkeeper, 12 mos. to 30 June	1,200 00	
Miss E. B. Goodwin, Clerk, Fees Records, 12 mos. to 30 June	1,100 00	
Miss M. Smyth, Voucher Clerk and Office Assistant, 12 July to 30 June at $936 per annum	903 00	
Miss E. Long, Clerk and Stenographer, 12 mos. to 30 June	800 00	
Miss M. Pyper, Clerk, 12 mos. to 30 June	800 00	
		$15,003 00

Registrar's Office.

James Brebner, Registrar, 12 mos. to 30 June	$4,250 00	
A. B. Fennell, Assistant Registrar, 12 mos. to 30 June	2,500 00	
A. T. Laidlaw, Assistant, 12 mos. to 30 June	2,250 00	
Miss N. Mackenzie, Minute Clerk (including services as Secretary to Graduate Board), 12 mos. to 30 June	1,200 00	
Miss Elizabeth Hargreaves, Clerk, 1 August to 30 June at $900 per annum	825 00	
Stenographers, each 12 mos. to 30 June:		
Miss M. McMillan	1,100 00	
Miss A. S. Meen	1,100 00	
Miss E. M. Sharpe	1,000 00	
Miss J. R. White	1,000 00	
Miss E. Keys, Register Clerk, 12 mos. to 30 June	900 00	
Miss Alice Dunnett, Filing Clerk, 12 mos. to 30 June	700 00	
		$16,825 00

1. *Salaries.*—Continued.

Superintendent's Office.

Graham Campbell, Superintendent of Buildings and Grounds, 12 mos. to 30 June (resigned)	$1,600 00	
A. D. LePan, Joint Superintendent, 12 mos. to 30 June	3,600 00	
W. H. Bonus, Assistant Superintendent, 12 mos. to 30 June	2,000 00	
W. L. D. Carnie, Chief Clerk, 12 mos. to 30 June	1,300 00	
Miss J. Bell, Clerk, 12 mos. to 30 June	1,000 00	
Miss M. Edgar, Stenographer, 12 mos. to 30 June	1,000 00	
Miss A. E. Fleming, Customs Clerk, 1 July to 5 February (part time) at $2 a week	62 86	
		$10,562 86

Library.

H. H. Langton, Librarian, 12 mos. to 30 June	$4,250 00	
Assistants, each 12 mos. to 30 June:		
Miss G. Buchan	1,600 00	
Miss H. Young	1,600 00	
Miss L. M. Mason	1,400 00	
Miss H. Fairbairn	1,100 00	
Miss E. V. Bethune	1,100 00	
Miss E. Creighton	1,100 00	
Miss H. G. B. Woolryche	1,100 00	
Mrs. A. C. Jones	1,100 00	
Miss Ethel Aldridge	950 00	
Miss M. L. Newton	950 00	
Miss A. E. Stennett	950 00	
Miss Isobel Edwards	800 00	
Assistants:		
Miss G. Cayley, 1 July to 30 September at $1,000 per annum (resigned)	250 00	
Miss H. C. Wrightman, 1 October to 30 June at $750 per annum	562 50	
Miss A. M. Cordingley, 15 October to 30 June at $750 per annum	531 25	
Miss M. Burgess, 1 November to 31 December at $60 per month; 1 January to 30 June at $750 per annum	495 00	
Miss C. B. McFayden, 1 December to 31 March at $60 per month; 1 April to 30 June at $750 per annum	427 50	
S. H. Fussell, Attendant (with rooms, heat and light as caretaken of building), 12 mos. to 30 June	950 00	
		21,216 25

Gymnasium.

J. W. Barton, Physical Director, 12 mos. to 30 June	$3,500 00	
T. A. Reed, Financial Secretary, 12 mos. to 30 June (charged to receipts from Athletic Field)	2,750 00	
Donald M. Barton, Gymnasium Instructor (10 months' salary)	2,250 00	
Wm. W. Winterburn, Swimming Instructor (10 months' salary)	1,800 00	
A. Williams, Instructor, 12 mos. to 30 June (reduced service)	550 00	
Locker Attendants:		
George Hare, 12 mos. to 30 June	1,200 00	
Wm. Rimmer, 7 months' salary	700 00	
		12,750 00

Military Studies.

W. R. Lang, Director, 12 mos. to 30 June (without salary—paid as Professor of Chemistry)	.....	.....

General Service.

S. J. Apted, services as Bedel, 12 mos. to 30 June (paid also $750 as Caretaker of Convocation Hall, and $250 for supervising Engineering Building)	125 00	
A. Bain, Attendant and Messenger, President's Office, 12 mos. to 30 June	1,000 00	
W. H. Fox, Mechanician, at $1,200 (war service, half salary), 6 mos. to 31 December (resigned)	300 00	
E. F. McKee, substitute, 364 hours at 85c.	309 44	

1. *Salaries.*—Continued.

Protective Service:		
J. Christie, Chief Officer of Discipline, war service, part salary, 3 mos. to 30 September, $100; 1 October to 30 June at $1,800 per annum, $1,350; allowance credited to pension fund for year, $100	$1,550 00	
Constables:		
D. Forbes, 12 mos. to 30 June	1,050 00	
W. May, 1 July to 28 October at $1,000 per annum, $327.27, and occasional service, $7.50	334 77	
R. D'Arcy, 27 October to 30 June at $1,050 per annum	626 88	
Nightwatchmen at $900 per annum:		
C. Fairbrass, 12 mos. to 30 June	900 00	
G. Iliff, 12 mos. to 30 June	900 00	
H. Diwell, 9 mos., 26 nights	740 00	
J. Banford, 8 mos., 8 nights	640 00	
S. Claxton, 4 mos., 16 nights	340 00	
J. Ashcroft, 2 mos., 2 nights	230 00	
Occasional service, relieving, etc.: A. Ruby, $175; W. Hanlon, $137.50; J. W. Calhoun, $25; J. H. Huddleston, $20; W. Bidwell, $10; J. Clinton, $5.16	372 66	
Secretaries, Students' Administrative Council (charged to Fees):		
C. C. Grant, 12 mos. to 30 June	1,200 00	
Miss E. McPherson (Women's S.A.C.), (Michaelmas Term)	140 00	
Miss A. E. M. Parkes (Easter Term)	360 00	
		11,118 75
		$99,275 86
Less charged to Athletic Field receipts	2,750 00	
Less charged to Fees	1,700 00	
		4,450 00
		$94,825 86

2. *Pensions and Retiring Allowances.*

Mrs. Julia Loudon, Ex-President Loudon's widow, annual pension	$2,500 00	
Prof. A. Baker, honorarium upon retirement	5,000 00	
Prof. W. H. Ellis, honorarium upon retirement	5,000 00	
Prof. B. E. Fernow, honorarium upon retirement	1,500 00	
Prof. A. McPhedran, honorarium upon retirement	1,050 00	
Prof. P. Toews, retiring allowance, 1919-20 (obit. 10 June, 1920)	400 00	
		$15,450 00

3. *President's Office.*

Office supplies, postage, printing and incidentals ($373.00):		
President Sir Robert Falconer, sundry disbursements	$74 51	
Grand & Toy, cabinet	4 25	
Office Specialty Mfg. Co., cases	3 30	
Ryerson Press, printing report	108 00	
Toronto World, advertising	54	
University Press, printing and stationery	182 40	
		$373 00

4. *Bursar's Office.*

Office supplies, postage, printing and incidentals ($1,850.01):		
Burroughs Adding Machine Co., inspection	$10 40	
The Bursar, petty disbursements, $105.21; postage, $280.00	385 21	
Bernard Cairns, stamps	10 00	
Canadian Bank of Commerce, transfer charges *re* War Loan bonds	3 71	
Copeland-Chatterson, Ltd., binders and indexes	122 27	
Elliott-Fisher, Ltd., ribbons	15 32	

4. *Bursar's Office.*—Continued.

Five-in-One Letter Envelope Co., envelopes	$21 50	
Grand & Toy, transfer case, $1.25; war tax stamps and embossing, $160.00; cheque books, $125.44	286 69	
Lake Simcoe Ice Supply Co., ice	5 94	
Lion Sporting Goods Co., revolvers, etc.	58 60	
C. W. Mack, stamp rack	2 15	
Might Directories, city directory	15 15	
Office Specialty Mfg. Co., sundry supplies	35 35	
Students' Book Dept., almanacs	5 20	
Townsend's Livery, hire of car	3 00	
United Typewriter Co., typewriter, etc.	171 05	
University Press, printing and stationery	639 15	
Freight charges	40	
Superintendent's Dept., labour, $11.48; material, $47.44	58 92	
Clerical assistance ($1,275.50):		
Mrs. Adcock, 29 days at $2.00 per day	58 00	
Miss J. Branton, 8½ mos. at $75.00 per month	637 50	
Miss E. Grew, 32 weeks at $15.00 per week	480 00	
W. B. Pearce, 5 weeks at $20.00 per week	100 00	
Alterations in office rooms ($1,747.70):		
R. Robertson & Sons, cutting doorway, $54.50; labour, $2.25	56 75	
Geo. B. Meadows, teller's cage	397 80	
Superintendent's Dept., labour, $943.86; material, $349.29	1,293 15	
Auditor's remuneration ($1,900.00):		
G. T. Clarkson, for year to 30 June, 1919, $700.00; year ending June, 1920, $1,200.00	1,900 00	
	$6,773 21	
Less fee for copy of deed, W. S. Morden	3 00	
		$6,770 21

5. *Registrar's Office.*

Office supplies and stationery ($1,276.65):		
D. A. Balfour Co., books of coupons	$45 00	
Field, Love & House, inspection	3 00	
Lake Simcoe Ice Supply Co., ice	5 94	
C. W. Mack, rubber stamp	2 40	
Might Directories, city directory	15 15	
Office Specialty Mfg. Co., cases, chairs, sections, etc.	222 90	
Students' Book Dept., books	12 40	
United Typewriter Co., repairs	35 40	
University Press, stationery and supplies	907 70	
Petty items (3)	3 38	
Superintendent's Dept., labour, $20.18; material, $3.20	23 38	
Postage ($1,050.00):		
The Bursar, postage supplied	1,050 00	
Clerical assistance ($250.00):		
Miss M. Fasken, 5 mos. at $50.00 per month	250 00	
Printing, other than Calendar ($190.25):		
University Press	190 25	
Printing Calendar and Curricula ($2,097.45):		
University Press	2,097 45	
Graduate Studies ($191.65):		
Office Specialty Mfg. Co., sections	123 00	
University Press, printing and stationery	68 65	
		$5,056 00

6. *Superintendent's Office.*

Office supplies, postage, printing and incidentals ($996.47):		
Art Metropole, tracing paper	$7 67	
D. A. Balfour Co., carbon	30 00	
The Bursar, postage supplied	151 00	
Copeland-Chatterson Co., binder and ledger leaves, etc.	32 57	

6. *Superintendent's Office.*—Continued.

Evening Telegram, advertising	$9 22	
J. H. Kirkwood, album sheets	39 45	
Lake Simcoe Ice Supply Co., ice	5 94	
C. W. Mack, rubber stamp	8 88	
Office Specialty Mfg. Co., desk stand, etc.	65 53	
Photography, Dept. of., prints, etc.	5 85	
The Superintendent, gratuity to postman	4 67	
Tablet & Ticket Co., letters	6 21	
United Typewriter Co., inspection and supplies	24 00	
University Press, stationery, printing and supplies	596 83	
Petty items (3)	1 61	
Freight charges	7 04	
Incidental expenses *re* work on buildings ($599.71):		
Sundry labour	599 71	
Clerical assistance ($389.38):		
Miss M. J. Smith, 4 weeks and 4 days at $10.00, $45.71; 6 weeks at $11.00, $66.00	111 71	
Miss E. Watson, 19 weeks and 5 days at $14.00	277 67	
	$1,985 56	
Less sale of plans	2 85	
		$1,982 71

7. *Library.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas ($53.93):		
Consumers' Gas Co.,	$53 93	
Water ($100.51):		
City Treasurer	100 51	
Caretaker's supplies ($114.97):		
Superintendent's Dept., labour, $4.70; material, $110.27	114 97	
Cleaning ($929.36):		
Canadian Cleaning Co., cleaning windows	30 00	
Superintendent's Dept., labour	899 36	
Repairs and Renewals ($1,092.76):		
Wm. Bartlett & Son, shades	12 26	
City Treasurer, elevator license	5 00	
D. B. I. Card, rat destroying	2 50	
Johnson Temperature Regulating Co., repairs	39 26	
A. Matthews, Ltd., gutters, $380.24; repairs to roof, $53.03	433 27	
Geo. A. Matthews, elevator repairs	10 40	
R. Robertson & Sons, pointing stone	22 00	
Superintendent's Dept., labour, $372.44; material, $195.63	568 07	
	$2,291 53	
Less sundry credits for repairs	2 40	
		$2,289 13
(*b*) General Library Appropriation:		
Books and periodicals, binding and office supplies ($14,239.43):		
Academy of Political Science	$5 57	
Prof. W. J. Alexander	5 10	
Alien Property Custodian for accounts of F. A. Brockhaus, $654.82; Gustav Fock, $73.91	728 73	
E. G. Allen & Son	6 48	
American Anthropological Association	6 48	
American Association for Advancement of Science	6 13	
American Association for Labour Legislation	5 58	
American Ceramic Society	6 67	
American Chemical Society	10 79	
American Concrete Institute	9 46	
American Economic Association	5 58	

7. *Library.*—Continued.

American Historical Society	$4 19
American Institute of Electrical Engineers	6 01
American Institute of Mining and Metallurgical Engineers	14 11
American Library Association	5 58
American Mathematical Society	5 41
American Medical Association	11 60
American Microscopical Society	12 52
American Mineralogist	2 31
American Society for Testing Materials	12 52
American Society of Civil Engineers	6 89
American Society of Mechanical Engineers	25 86
American Statistical Association	3 35
American Water Works Association	10 94
D. Appleton & Co.	16 63
Architectural Book Publishing Company	6 89
Art & Archaeology	3 63
Prof. A. Baker	30 00
Geo. Banta Publishing Company	4 02
Bibliographical Society of America	2 80
Biggar & Burton	10 00
F. A. Brockhaus	747 47
Albert Britnell	160 00
Canadian Annual Review, Limited	6 08
Miss W. Cartwright	13 50
C. D. Cazenove & Son	1,793 53
Honore Champion	11 45
Chemical Metallurgical and Mining Association of South Africa	45 70
J. Clark Company	73 84
Copp Clark Company	2 80
Mrs. D. G. Cox	42 00
Wm. Dawson & Sons	597 96
Department of Public Printing and Stationery, Ottawa.	3 00
W. R. Douglas	4 50
Jacob Dybwad	101 35
Dr. A. W. H. Eaton	5 41
F. W. Faxon Company	11 15
H. G. Fiedler	2 61
Buchhandlung Gustav Fock	5 75
Gauthier-Villars	4 36
Ginn & Company	3 15
A. A. Gough	27 86
A. Hermann & Fils	272 80
H.M. Stationery Office	30 62
Hispanic American Historical Review	3 35
Ulrico Hoepli	78 81
Johns Hopkins Press	26 32
Industrial Australian & Mining Standard	14 99
Institute of Metals	21 85
International Magazine Company	48 79
Dr. H. B. Jacobs	5 58
R. James	15 00
F. Johnson	4 00
John Lane Co.	6 22
Librarie Terquem	10 30
Libreria Internazionale	143 79
Linnean Society of London	7 16
B. Login & Son	4 06
R. C. MacMahon	11 82
Marine Biological Laboratory	6 69
C. V. Mosby Medical Book Publishing Co.	6 17
National Geographic Society	3 79
National Municipal League	5 41
National Tax Association	5 58

7. *Library.*—Continued.

New Brunswick Historical Society	$2 50	
M. V. Martinus Nijhoff	15 50	
L. S. Olschki	31 78	
Ontario Library Association	5 00	
Princeton University Press	6 97	
Public School Publishing Co.	5 02	
W. F. Quarrie & Co.	55 00	
Harold Reeves	35 92	
The Review	6 31	
Russell Sage Foundation	6 94	
P. Sandiford	10 00	
John Skinner Book Store	5 64	
G. E. Stechert & Co.	192 02	
Students' Book Dept.	1,513 90	
Victoriana Suarez	440 01	
The Survey	5 19	
Peter G. Tait	3 95	
J. Terquem	477 09	
Torrey Botanical Club	4 60	
M. H. Ungemach	27 92	
United Publishers of Canada, Ltd.	7 00	
University of Chicago Press	40 48	
M. Weissenbruch	7 40	
H. W. Wilson Co.,	77 66	
Wistar Institute of Anatomy and Biology	62 81	
G. M. Wrong	3 00	
Sundry small accounts (6)	7 70	
The Bursar, postage supplied	272 00	
The Librarian, disbursements: book deposits refunded, $214.30; cables, $8.03; car tickets, cartage and sundries, $17.85; to be accounted for in 1920-21, $11.61=$251.79; less charged to previous year, $19.19	232 60	
Allen Mfg. Co., laundry	13 10	
Art Metropole, supplies	3 56	
Grand & Toy, desk and supplies	62 90	
C. W. Mack, ink, rubber stamps and repairs	14 10	
United Typewriter Co., inspection and supplies	58 23	
Petty items (3)	2 80	
University Press, binding, $2,859.42; printing and stationery, $1,910.91	4,770 33	
Freight charges	181 77	
Superintendent's Dept., labour, $89.69; material, $92.64	182 33	
	$14,239 43	
New Book Stack:		
Aikenhead Hardware, on account contract	$17,500 00	
Superintendent's Dept., labour, $175.19; material, $208.20	383 39	
	$32,122 82	
Less graduates' deposits, $299.25; fines, $257.40; replacement of books lost, $50.60; subscriptions to and sales of books, $26.43; sundries, $2.30..	635 98	
		$31,486 84
		$33,775 97

8. *Gymnasium, Students' Union and Athletics.*

(*a*) Maintenance of Building:		
Secretary-Treasurer, Hart House, University's share for Gymnasium portion	$1,500 00	
(*b*) Athletics:		
Gymnastic appliances, etc. ($133.54):		
G. H. Corsan, water wings	25 00	
Ingram & Bell, bandages, etc.	64 35	

8. *Gymnasium, Students' Union and Athletics.*—Continued.

H. A. Wilson Co., polo ball, etc.	$26 40	
Freight charges	2 52	
Superintendent's Dept., labour, $7.56; material, $7.71..	15 27	
Instruction in Swimming (including women students), ($1,200.00):		
G. H. Corsan, services as instructor	1,200 00	
Physical Instruction to Women Students ($1,758.72):		
Miss Ivy Coventry, instructress	1,250 00	
Dr. Edna Guest, examiner	200 00	
Miss J. L. Goodman, pianist's services	77 75	
Miss Ivy Coventry, rent of piano	51 00	
Women's Athletic Association, University College account:		
F. Hanmer, attendant at basket ball practices	18 50	
Geo. P. Freeland, photographs	25 00	
Miss K. G. Pepler, refreshments	4 87	
Miss Ivy Coventry, petty disbursements	8 10	
Torontonensis, 1920, articles *re* athletic teams	25 00	
University College Women's Athletic Association, League fees	7 50	
University of Toronto Athletic Association, hockey privileges	50 00	
Women's Athletic Association, Victoria College Account:		
F. Hanmer, attendant at basket ball practices	13 00	
P. A. McBride, tennis balls	8 00	
Torontonensis, 1920, articles re athletic teams	20 00	
(*c*) Physical Training ($3,274.20):		
F. H. Blake, gymnasium director, 10 months salary..	2,000 00	
H. J. Macdonald, clerk (for attendance) 9 months salary	750 00	
J. G. Gauld, stenographer (part time) 7 months salary	315 00	
W. S. Vaughan, pianist's services	100 00	
Attendance records and Card System ($109.20):		
University Press, printing	109 20	
(*d*) Department of Military Studies ($84.86):		
Canadian Military Gazette, subscription	5 00	
Photography, Department of, slides	6 25	
United Typewriter Co., rent of typewriter	30 00	
University Press, printing	11 85	
W. R. Lang, disbursements:		
Postage, 84c; lantern screen, $7.30; maps, $15.98; stationery, $7.64	31 76	
		$7,951 32

9. *Convocation Hall.*

Heat and light (supplied from Central Power Plant):		
Water ($78.09):		
City Treasurer	$78 09	
Caretaker's supplies ($148.66):		
Superintendent's Dept., labour, $3.31: material, $145.35....	148 66	
Cleaning ($699.66):		
Allen Mfg. Co., laundry	50	
Canadian Cleaning Co., cleaning windows	7 00	
Superintendent's Dept., labour	692 16	
Repairs and renewals ($1,109.26):		
Art Metropole, draughting materials	5 00	
A. Matthews, repairs to roof	79 38	
Geo. A. Matthews, rewinding armature	58 85	
G. R. Workman, draughting plans	15 00	
Superintendent's Dept., labour, $564.74; material, $386.29.	951 03	
Caretaker, S. J. Apted, 12 months to 30th June (with house, heat and light)	750 00	
	$2,785 67	
Less amount received from Societies, etc. (net)	312 06	
		$2,473 61

10. *Grounds.*

Labour, gravel, roadways, granolithic walks, flowers and shrubs ($14,867.49):		
Aikenhead Hardware Co., hardware	$28 66	
Asphaltic Concrete Co., building roadways	4,717 78	
City Treasurer, water rates	81 71	
Connell Anthracite Mining Co., fuel	11 25	
T. Eaton Co., tarpaulin, etc.	17 10	
Geo. Lugsden Co., lawn boots	24 00	
J. J. Milligan, flowers	64 00	
J. H. McCabe, fodder	211 47	
Patterson & Heward, metal tags	4 50	
Dr. J. N. Pringle, veterinary services	6 50	
Provincial Treasurer, auto license	15 00	
R. Robertson & Sons, culverts	76 52	
Rice Lewis & Sons, lawnmower	93 35	
John Rydall, horse shoes	29 80	
Steele, Briggs Seed Co., grass seed	61 30	
J. A. Simmers, water ballast	75 00	
W. H. Thomson, teaming	652 00	
Toronto Sign Co., painting truck	6 00	
Universal Car Co., hood, etc	15 60	
Petty items (2)	5 02	
Superintendent's Dept., labour, $7,731.88; material, $1,044.09	8,775 97	
	$14,972 53	
Less received from sale of wood, etc., $55.13; fine, $2.00; cartage, $47.91	105 04	
	$14,867 49	
Foreman Gardener, G. Trotter, 12 months to 30th June	$1,100 00	
Protective service ($600.35):		
A. A. Allan & Co., caps	12 25	
D. S. Buddo, time slips	1 85	
T. Eaton Co., rubber coat, etc	10 00	
International Business Machine Co., time slips	3 67	
Ontario Tailoring Co., uniforms	225 00	
Ryrie Bros., repairs to clock	5 25	
Superintendent's Dept., labour, $234.53; material, $107.80	342 33	
Motor Truck ($922.00):		
Universal Car Co., Ltd., truck	922 00	
		$17,489 84

11. *Examinations.*

NAME.	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendant.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.
Aldous, J. E. P.	20 00	6 75	.....	.....	26 75
Alexander, W. J.	31 75	.....	.....	.....	31 75
Allan, F. B.	30 00	.....	.....	.....	30 00
Allin, S. J.	.....	.....	.....	6 25	6 25
Anderson, G. R.	11 25	.....	.....	.....	11 25
Angus, R. W.	5 50	.....	.....	.....	5 50
Ardagh, E. G. R.	13 00	.....	.....	.....	13 00
Armour, R. G.	65 00	.....	.....	.....	65 00
Atkinson, G. D.	36 40	29 10	.....	.....	65 50
Awde, E. O.	.....	2 16	3 00	.....	5 16
Baker, H. W.	45 00	.....	.....	.....	45 00
Ballard, W. H.	.....	4 00	5 00	.....	9 00
Banting, E. W.	.....	.....	35 00	.....	35 00
Barlow, H. S.	.....	.....	.....	18 75	18 75
Batt, H. E.	11 25	.....	.....	.....	11 25
Beatty, S.	40 00	.....	.....	.....	40 00
Bemrose, B. W.	.....	.....	38 00	.....	38 00
Bennett, S. G.	.....	.....	22 50	.....	22 50
Bensley, B. A.	12 25	.....	.....	.....	12 25
Bingham, G. A.	5 00	.....	.....	.....	5 00
Blackwood, W. C.	5 50	.....	.....	.....	5 50
Bluethner, W. A.	20 00	8 90	.....	.....	28 90
Boddington, D. H.	20 25	.....	.....	.....	20 25
Boswell, M. C.	11 00	.....	.....	.....	11 00
Bott, E. A.	.....	.....	2 50	.....	2 50
Brady, Alex.	.....	.....	.....	15 00	15 00
Brebner, W. B.	.....	.....	10 00	7 50	17 50
Brett, G. S.	5 25	.....	.....	.....	5 25
Broome, E.	30 00	4 50	.....	.....	34 50
Brown, A. Grant	6 00	.....	.....	.....	6 00
Brown, G.	.....	.....	.....	30 00	30 00
Brownlee, H.	.....	.....	22 50	.....	22 50
Buchanan, M. A.	18 50	.....	.....	.....	18 50
Bunt, F. A.	.....	.....	.....	13 75	13 75
Burd, W.	.....	.....	.....	8 75	8 75
Burton, E. F.	51 00	.....	.....	.....	51 00
Butler, T. B.	.....	.....	.....	25 00	25 00
Caesar, L.	14 53	.....	.....	.....	14 53
Caley, D. R.	11 50	.....	.....	.....	11 50
Cameron, I. H.	32 75	.....	.....	.....	32 75
Cameron, M. H. V.	60 00	.....	.....	.....	60 00
Campbell, J. A.	11 25	.....	.....	.....	11 25
Carr, H.	5 25	.....	.....	.....	5 25
Carruthers, A.	15 75	.....	.....	.....	15 75
Chant, C. A.	10 50	.....	.....	.....	10 50
Chant, E. A.	.....	.....	.....	17 50	17 50
Clarkson, F. A.	50 00	.....	.....	.....	50 00
Clawson, W. H.	12 75	.....	.....	.....	12 75
Cleland, F. A.	45 00	.....	.....	.....	45 00
Clemens, W. A.	9 00	.....	32 50	.....	41 50
Clute, A. R.	61 75	.....	.....	.....	61 75
Clutterbuck, H. E.	45 00	.....	.....	.....	45 00
Cochrane, C. N.	12 25	.....	.....	.....	12 25
Cockburn, J. R.	11 50	.....	.....	.....	11 50
Coghill, J. G.	.....	.....	.....	47 50	47 50
Cole, C. E. C.	45 00	.....	.....	.....	45 00
Coleman, A. P.	10 50	.....	.....	.....	10 50
Coombs, F. E.	.....	.....	36 00	.....	36 00

11. *Examinations.*—Continued.

NAME.	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendant.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.
Cornish, G. A.	.....	.....	25 00	.....	25 00
Cosgrave, F. H.	5 25	.....	22 50	.....	27 75
Craig, J. A.	5 25	.....	.....	.....	5 25
Craigie, E. H.	.....	.....	37 50	.....	37 50
Crawford, H. G.	19 50	.....	.....	.....	19 50
Crawford, J. T.	.....	.....	35 00	.....	35 00
Cross, A.	.....	.....	.....	7 50	7 50
Crow, J. W.	6 75	.....	.....	.....	6 75
Crerar, S. R.	.....	.....	27 50	.....	27 50
Cudmore, S. A.	11 75	.....	.....	.....	11 75
Currelly, C. T.	5 25	.....	.....	.....	5 25
Dale, E. A.	.....	.....	52 50	.....	52 50
Dean, H. H.	42 00	.....	.....	.....	42 00
Dearness, J.	.....	4 00	4 00	.....	8 00
de Beaumont, V.	8 25	.....	2 50	.....	10 75
DeLury, A. T.	32 00	.....	.....	.....	32 00
DeWitt, N. W.	22 50	.....	.....	.....	22 50
Detweiler, H. K.	7 00	.....	.....	.....	7 00
Duff, A. R.	.....	.....	2 50	.....	2 50
Duff, D.	28 50	.....	72 50	.....	101 00
Dunbar, W. B.	.....	.....	28 00	.....	28 00
Dyer, F. C.	.....	.....	25 00	.....	25 00
Elliott, J. H.	45 00	.....	.....	.....	45 00
Evans, G. A.	55 50	.....	.....	.....	55 50
Fairclough, W. E.	34 50	7 00	.....	.....	41 50
Fairley, Barker	.....	.....	42 00	.....	42 00
Faull, J. H.	22 00	.....	.....	.....	22 00
Fetzer, W. R.	.....	.....	22 50	.....	22 50
Finlayson, B. M.	.....	.....	.....	15 00	15 00
Fitzgerald, J. G.	18 25	.....	.....	.....	18 25
Fleming, R. R.	11 50	.....	.....	.....	11 50
Fletcher, A. A.	45 00	.....	.....	.....	45 00
Ford, H. E.	5 25	.....	.....	.....	5 25
Forsyth, W. O.	30 00	60 24	.....	.....	90 24
Franklin, H. J.	.....	.....	32 00	.....	32 00
Fricker, A. H.	25 25	.....	.....	.....	25 25
Fulmer, H. L.	39 25	.....	.....	.....	39 25
Gaby, R. E.	60 00	.....	.....	.....	60 00
Gallie, J. G.	45 00	.....	.....	.....	45 00
Gallie, W. E.	90 00	.....	.....	.....	90 00
Garden, J. H.	.....	.....	.....	1 25	1 25
Gibson, A. L.	38 50	.....	.....	.....	38 50
George, R.	.....	.....	32 50	.....	32 50
Goldie, Wm.	45 00	.....	.....	.....	45 00
Goldsmith, P. G.	45 00	.....	.....	.....	45 00
Gordon, H. K.	.....	.....	.....	15 00	15 00
Graham, Girard	.....	.....	.....	20 00	20 00
Graham, R. R.	32 25	.....	.....	.....	32 25
Graham, R. R.	45 00	.....	.....	.....	45 00
Graham, W. R.	33 00	.....	.....	.....	33 00
Grange, E. R.	.....	.....	2 50	.....	2 50
Gray, M.	.....	.....	.....	15 00	15 00
Greatrex, W. K.	.....	.....	2 50	.....	2 50
Guess, G. A.	13 00	.....	.....	.....	13 00
Guest, W. S.	5 25	.....	26 50	.....	31 75
Gwatkin, R.	11 50	.....	.....	.....	11 50
Gwyn, N.	45 00	.....	.....	.....	45 00
Ham, A.	43 75	2 00	3 00	.....	48 75

11. *Examinations.*—Continued.

NAME.	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendant.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.
Harcourt, R.	35 50				35 50
Hardy, D.				6 25	6 25
Hardy, W. G.			40 00		40 00
Harris, R. I.	45 00				45 00
Harrison, H.	60 00				60 00
Harrison, J. W. F.	23 70	1 75			25 45
Harvey, L. C.				13 75	13 75
Hay, S. M.	45 00				45 00
Heebner, C. F.	111 00				111 00
Henderson, V. E.	9 50				9 50
Hendry, W. B.	45 00				45 00
Henry, L. J.				22 50	22 50
Hewlett, W. H.	24 00	6 50			30 50
Holt, G. E.			27 50		27 50
Horning, J. H.				16 25	16 25
Horning, L. E.	8 25				8 25
Howland, G. W.	5 00				5 00
Howitt, J. E.	58 25				58 25
Hunt, Wm.	6 75				6 75
Hunter, A.	27 50				27 50
Hutchison, H. S.	45 00				45 00
Hutton, M.	5 25				5 25
Irwin, J. A.			36 00		36 00
Jackman, W. T.	7 25				7 25
Jackson, G. E.	11 00				11 00
Jackson, K. B.			25 00		25 00
Jeanneret, F. C. A.	13 75		72 00		85 75
Jones, D. H.	33 00				33 00
Jones, G. M.			12 50		12 50
Keeling, W. L.				6 25	6 25
Kenrick, F. B.	26 50				26 50
Kihl, V.	42 10	11 00			53 10
King, J. T.			27 50		27 50
Kingerly, A.				2 50	2 50
Kinnear, J. A.	50 00				50 00
Kirkwood, W. A.			32 50		32 50
Kittredge, R. E. L.	5 25		42 50		47 75
Knight, G. H.	68 70	114 70			183 40
Krug, S. J.			25 00		25 00
Laing, J. C.	5 25		20 50		25 75
Lane, W. B.	5 50				5 50
Langford, A. L.	2 63	5 00			7 63
LeMesurier, A. B.	45 00				45 00
LeDrew, H. H.	19 75				19 75
Leitch, A.	14 75				14 75
Lewis, V. G.				41 25	41 25
Lipari, A.			17 50		17 50
Lobb, A. M.	5 50				5 50
Loudon, J. D.	65 00				65 00
Loudon, W. J.	7 75				7 75
Lund, T. H.	7 25				7 25
Mabee, O. R.	45 00				45 00
MacCallum, J. M.	50 00				50 00
Macdonald, G. G.			25 00		25 00
MacIver, R. M.	5 25				5 25
Mackenzie, J. J.	14 75				14 75
Mackenzie, M. A.	14 75				14 75
Maclennan, D. N.	50 00				50 00

11. *Examinations.*—Continued.

NAME.	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendant.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.
MacLennan, H. A.	.....	.....	.....	22 50	22 50
Maclennan, J. E. H.	.....	.....	.....	6 25	6 25
Macleod, J. J. R.	41 25	.....	.....	.....	41 25
Madill, H. H.	.....	.....	15 00	.....	15 00
Marlow, F. W.	50 00	.....	.....	.....	50 00
Marshall, C. E.	10 50	.....	.....	.....	10 50
Martin, Thomas	34 00	27 50	.....	.....	61 50
May, E. R.	.....	.....	.....	7 50	7 50
Mayberry, C. A.	.....	2 00	2 00	.....	4 00
McConnell, A. W.	5 25	.....	.....	.....	5 25
McCoy, J.	.....	2 00	2 00	.....	4 00
McCulloch, E. A.	11 50	.....	.....	.....	11 50
McDonald, N. G.	.....	.....	27 50	.....	27 50
McFarlane, J.	18 50	.....	.....	.....	18 50
McGillivray, D.	5 00	.....	.....	.....	5 00
McGilvray, C. D.	11 50	.....	.....	.....	11 50
McGowan, J	5 25	.....	.....	.....	5 25
McGugan, D. F.	.....	.....	5 50	.....	5 50
McIlwraith, K. C.	50 00	.....	.....	.....	50 00
McIntosh, R. A.	11 50	.....	.....	.....	11 50
McKeown, P. K.	45 00	.....	.....	.....	45 00
McKellar, H. S.	33 25	.....	198 50	.....	231 75
McLaughlin, J. F.	5 25	.....	.....	.....	5 25
McMurrich, J. P.	12 00	.....	.....	.....	12 00
McPhedran, A.	6 50	.....	.....	.....	6 50
McPhedran, A. G.	50 00	.....	.....	.....	50 00
McPhedran, J. H.	45 00	.....	.....	.....	45 00
McPhedran, W. F.	45 00	.....	.....	.....	45 00
Meader, F. D.	10 50	.....	.....	.....	10 50
Melson, J. W.	.....	.....	47 50	.....	47 50
Menzies, P. K.	45 00	.....	.....	.....	45 00
Mickle, G. R.	20 00	.....	.....	.....	20 00
Miller, W. Lash	6 00	.....	.....	.....	6 00
Milligan, W. E.	.....	.....	22 50	.....	22 50
Milne, T. H.	.....	.....	35 00	.....	35 00
Milner, W. S.	5 25	.....	.....	.....	5 25
Moffatt, R. C.	26 25	.....	.....	.....	26 25
Moorhead, A. S.	60 00	.....	.....	.....	60 00
Mouré, F. A.	22 25	.....	.....	.....	22 25
Mulqueen, F. J.	.....	.....	2 50	.....	2 50
Murch, W. H.	.....	2 00	2 00	.....	4 00
Murray, L.	45 00	.....	.....	.....	45 00
Murray, R. W.	.....	.....	125 50	.....	125 50
Nethercott, J. P. S.	8 00	.....	.....	.....	8 00
Oille, J. A.	65 00	.....	.....	.....	65 00
Orr, W. H.	.....	.....	30 00	.....	30 00
Owen, E. F.	5 25	.....	36 00	.....	41 25
Palmer, E. F.	13 50	.....	.....	.....	13 50
Parkin, J. H.	5 50	.....	22 50	.....	28 00
Parks, W. A.	6 51	.....	.....	.....	6 51
Patterson, A. W.	.....	2 30	.....	.....	2 30
Perfect, A. H.	45 00	.....	.....	.....	45 00
Perry, S. W.	.....	.....	20 00	.....	20 00
Phillips, T. G. W.	.....	.....	.....	10 00	10 00
Piersol, W. H.	6 25	.....	.....	.....	6 25
Pogson, J. H.	.....	.....	.....	32 50	32 50
Porritt, G. H.	55 50	11 60	.....	.....	67 10
Pounder, I. R.	28 75	.....	40 00	.....	68 75

11. *Examinations.*—Continued.

NAME.	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendant.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.
Powell, F. G.	10 50	.....	.....	.....	10 50
Powell, N A.	43 00	.....	.....	.....	43 00
Pratt, E. J.	.....	.....	29 00	.....	29 00
Price, H. W.	5 50	.....	.....	.....	5 50
Primrose, A.	50 00	.....	.....	.....	50 00
Pringle, J. N.	11 50	.....	.....	.....	11 50
Rankin, W. H.	7 00	.....	.....	.....	7 00
Ransom, J. T.	.....	.....	2 50	.....	2 50
Reed, H. R.	.....	.....	22 50	.....	22 50
Reid, M. E.	.....	.....	.....	5 00	5 00
Reid, M. G.	.....	.....	2 50	.....	2 50
Richardson, W. L. C.	.....	.....	51 00	.....	51 00
Robertson, D. E.	45 00	.....	.....	.....	45 00
Robertson, J. C.	2 63	.....	.....	.....	2 63
Robertson, L. B.	45 00	.....	.....	.....	45 00
Robins, J. D.	35 00	.....	.....	.....	35 00
Robinson, T. A.	45 00	.....	.....	.....	45 00
Robinson, T. R.	5 50	.....	.....	.....	5 50
Rolfson, O.	.....	.....	2 50	.....	2 50
Rolph, F. W.	23 50	.....	.....	.....	23 50
Rose, H. C.	.....	.....	28 00	.....	28 00
Ross, G. W.	5 00	.....	.....	.....	5 00
Ross, R. A.	40 00	.....	.....	.....	40 00
Royal Coll. of Dental Surgeons.	1,294 25	156 17	25 00	26 25	1,501 67
Royce, G.	50 00	.....	.....	.....	50 00
Rudolf, R. D.	89 00	.....	.....	.....	89 00
Ryerson, E. S.	50 00	.....	.....	.....	50 00
Sackville, J. P.	59 00	.....	.....	.....	59 00
Sagar, W. L.	.....	.....	2 50	.....	2 50
Saunders, D. W.	16 50	.....	.....	.....	16 50
Scarrow, A. N.	.....	.....	40 00	.....	40 00
Scott, P. L.	55 50	.....	.....	.....	55 50
Scott, W. G.	.....	.....	.....	1 25	1 25
Scott, Wallace	45 00	.....	.....	.....	45 00
Scott, W. A.	45 00	.....	.....	.....	45 00
Shaw, J. E.	21 50	.....	.....	.....	21 50
Shenstone, N. S.	45 00	.....	.....	.....	45 00
Shuttleworth, C. B.	45 00	.....	.....	.....	45 00
Silverthorn, G.	45 00	.....	.....	.....	45 00
Simpson, H. C.	5 50	.....	.....	.....	5 50
Sinclair, M.	.....	.....	25 00	.....	25 00
Sissons, C. B.	10 50	.....	.....	.....	10 50
Skene, J. B.	.....	.....	.....	15 00	15 00
Skilling, W. M.	.....	.....	.....	6 25	6 25
Smith, E. G.	.....	.....	.....	56 25	56 25
Smith, D. King	11 50	.....	.....	.....	11 50
Smith, W. H.	.....	2 00	2 00	.....	4 00
Smither, W. J.	.....	.....	27 50	.....	27 50
Spencer, G. J.	29 75	.....	.....	.....	29 75
Spring, H. P.	.....	.....	7 50	.....	7 50
Squirrel, W. J.	21 75	.....	.....	.....	21 75
Starr, C. L.	45 00	.....	.....	.....	45 00
Stevenson, O. J.	61 50	.....	.....	.....	61 50
Stewart, L. B.	5 25	.....	.....	.....	5 25
Strathy, G. S.	45 00	.....	.....	.....	45 00
Squair, M. R.	.....	.....	.....	15 00	15 00
Tattersal, R.	37 25	20 00	.....	.....	57 25
Taylor, R.	.....	.....	25 00	.....	25 00
Taylor, N. B.	60 75	.....	.....	.....	60 75

11. *Examinations.*—Continued.

NAME.	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendant.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.
Taylor, W. R.	27 25	.....	6 00	.....	33 25
Temple, C. A.	11 50	.....	.....	.....	11 50
Thomas, H. F.	.....	2 00	2 00	.....	4 00
Thompson, D. A.	.....	.....	.....	23 75	23 75
Thomson, R. B.	26 00	.....	.....	.....	26 00
Tier, W.	.....	3 85	3 00	.....	6 85
Titus, O. W.	.....	.....	7 50	.....	7 50
Tomlinson, A. H.	6 75	.....	.....	.....	6 75
Toole, W.	59 00	.....	.....	.....	59 00
Treadgold, W. M.	5 50	.....	.....	.....	5 50
Tripp, J. D. A.	10 00	14 05	.....	.....	24 05
Tye, W. F.	40 00	.....	.....	.....	40 00
Uren, J. F.	5 00	.....	.....	.....	5 00
Unwin, G. H.	5 00	.....	.....	.....	5 00
Waddington, M. M.	12 00	.....	95 00	.....	107 00
Walker, T. L.	6 51	.....	.....	.....	6 51
Wallace, G. L.	.....	.....	4 00	.....	4 00
Wallace, J. B.	.....	.....	36 00	.....	36 00
Wallace, M. W.	12 25	.....	.....	.....	12 25
Wasteneys, H.	5 00	.....	.....	.....	5 00
Watson, B. P.	93 00	.....	.....	.....	93 00
Watson, W. V.	45 00	.....	.....	.....	45 00
Watt, J. C.	9 00	.....	72 50	.....	81 50
Weaver, C. H.	11 50	.....	.....	.....	11 50
Wesley, R. W.	45 00	.....	.....	.....	45 00
Wilkes, G. H.	.....	.....	20 00	.....	20 00
Willan, H.	38 50	.....	.....	.....	38 50
Williams, R. Hodder	75 25	.....	.....	.....	75 25
Wilson, A. C.	.....	.....	2 50	.....	2 50
Wilson, G. E.	50 00	.....	.....	.....	50 00
Wishart, D. J. G.	45 00	.....	.....	.....	45 00
Woodcock, J. N.	25 50	.....	69 50	.....	95 00
Woodhead, W. D.	16 50	.....	118 50	.....	135 00
Wookey, G. E.	12 75	.....	.....	.....	12 75
Workman, G. R.	.....	.....	36 50	.....	36 50
Wright, A. B.	5 00	.....	.....	.....	5 00
Wright, C. H. C.	11 75	.....	.....	.....	11 75
Wright, W. H.	.....	.....	67 50	.....	67 50
Wright, W. J. T.	.....	.....	17 50	.....	17 50
Young, G. S.	50 00	.....	.....	.....	50 00
Yule, G.	.....	2 00	2 00	.....	4 00
Zavitz, C. A.	20 25	.....	.....	.....	20 25
Zimmer, A. R.	.....	.....	35 00	.....	35 00
	7,536 46	515 07	2,630 00	600 00	11,281 53

11. *Examinations.*—Continued.

Apportionment.

	Remuneration as Examiner.	Expenses.	Presiding Examiner.	Attendants.	Totals.
	$ c.	$ c.	$ c.	$ c.	$ c.
Arts	725 78	5 00	622 50	298 75	1,652 03
Medicine	3,297 25	.....	175 00	42 50	3,514 75
Engineering and Applied Science	351 25	.....	816 50	30 00	1,197 75
Education	.....	.....	157 50	25 00	182 50
Law	61 75	.....	.....	.....	61 75
Dentistry	1,294 25	156 17	115 00	26 25	1,591 67
Music	540 40	342 30	61 00	.....	943 70
Pharmacy	277 50	11 60	50 00	36 25	375 35
Agriculture	751 53	.....	67 50	.....	819 03
Veterinary Science	236 75	.....	40 00	.....	276 75
Junior Matriculation	.....	.....	525 00	141 25	666 25
	7,536 46	515 07	2,630 00	600 00	11,281 53

Remuneration to Examiners (detailed above)		$7,536 46	
Presiding and Attendance (detailed above)		3,230 00	
Examination Supplies and Sundries, including incidental expenses of Examiners ($3,719.47):			
Examiners' Expenses (detailed above)		515 07	
Business Systems Co., ledger sheets		18 29	
Students' Book Department, book		1 10	
University Pess, examination books, stationery, etc.		2,873 90	
Filling in diplomas:			
R. M. Williams, $48.60; C. L. Calvin, $10.00		58 60	
Rent of rooms and pianos at various centres:			
E. O. Awde	$1 00		
W. H. Ballard	3 00		
S. Boardman (tuning)	3 00		
Miss A. Fansher	3 00		
Mrs. J. E. Hollingshead	8 00		
Rev. A. L. Howard	5 00		
Messrs. Nordheimer Piano & Music Co.	22 00		
Miss R. M. Smith	5 00		
Rev. G. Yule	1 00		
		51 00	
Cartage, etc:			
Superintendent's Department, labour		74 79	
Supplies for Pharmacy Examinations:			
C. F. Heebner		126 72	
Printing Examination Papers and Class Lists ($3,258.60):			
University Press		3,258 60	
			$17,744 53
Less sundry credits			38 75
			$17,705 78

12. *Convocation Expenses.*

Geo. Coles, catering	$1,145 00	
Harcourt & Sons, hoods and gowns	500 50	
J. W. Mulholland, decorating hall	10 00	
Highlanders' Band, services	81 00	

12. *Convocation Expenses.*—Continued.

R. M. Williams, illuminating	$65 00	
University Press, printing	745 35	
Sundry newspapers, announcements	16 57	
Superintendent's Dept., labour	40 34	
		$2,603 76

13. *Receptions to Societies and University Visitors.*

Expenses *re* sundry public lectures:		
By Dr. L. A. Bauer ($25.00):		
Honorarium	$25 00	
By Prof. Le Bidois ($58.80):		
Honorarium	40 00	
King Edward Hotel, accommodation	14 00	
Taxi service, J. H. Cameron	2 80	
Attendant, J. Wicksey	2 00	
By Prof. A. P. Newton ($51.00):		
Honorarium	50 00	
Attendant, J. Wicksey	1 00	
By Sir Bertram Windle ($271.00):		
Honorarium	250 00	
Lantern operator, A. J. Burge	12 00	
Attendant, J. Wicksey	6 00	
Photography, Dept. of, slides	3 00	
Sir Robert Falconer, entertainment of Rockefeller Foundation visitors, etc.	149 91	
Secretary Treasurer, Hart House, dinner to Provincial Ministers	47 20	
Prof. P. Gillespie, towards reception of Engineering Alumni	50 00	
Prof. W. Lash Miller, towards meeting of Society of Chemical Industry	200 00	
Geo. Coles, catering at Ontario Educational Association reception	60 00	
King Edward Hotel, accommodation for Prof. Lillie	6 30	
University Schools, reception to parents, disbursements	93 07	
James Brebner, *re* matriculation conference	4 60	
Sundry Attendance:		
E. A. Bishop	4 50	
T. Motton	2 00	
Wm. Stewart	2 00	
S. J. Apted	2 00	
		$1,027 38

14. *Telephones.*

Bell Telephone Co., telephone service to 30 June, 1920		$3,215 95	
Less receipts from sub-services	$466 62		
And from slot machines	47 79		
		$514 41	
			$2,701 54
Switchboard operators ($1,385.74):			
Miss E. Fox, 39 weeks at $17.50 per week, $682.50; 3 days at $2.50 per day, $7.50; 4 days at $2.91 2-3, $11.67		701 67	
Miss Forfar, 6 weeks at $18.00 per week, $108.00; 3 days at $18.00 per week, $9.00		117 00	
Mrs. Lawrence, 32 weeks and 1 day at $7.00 per week		155 16	
Miss Malloy, 3 weeks at $15.00 per week		45 00	
Miss Scott, 110½ days at $3.00 per day		331 50	
Jack Cohen, 58 hours at 15c. per hour		8 70	
Miss A. E. Fleming, 52½ hours at 15c per hour		7 88	
Miss M Johnston, 55½ hours at 15c. per hour		8 33	
Miss Chapman, 3½ days at $3.00 per day		10 50	
Automatic Switchboard ($65.00):			
Automatic Electric Co., U. S. exchange on $2,000.00 paid last year		65 00	

14. *Telephones.*—Continued.

Instruments for Automatic Switchboard ($2,889.73):			
Superintendent's Dept., labour, $245.50; material, $2,549.38		$2,794 88	
A. P. Lintz, installing switches, etc.		50 55	
Automatic Telephone & Time Recorders, repairs		3 10	
University Press, telephone books		41 20	
		$7,042 01	
Less charged against following Departments for instruments installed:			
Applied Chemistry	$150 00		
Applied Mechanics	100 00		
Astro-Physics	50 00		
Biological	50 00		
Chemistry	200 00		
C. A. L. Research Division	50 00		
Electro Chemistry	100 00		
Engineering Physics	50 00		
Electrical Engineering	100 00		
Food Chemistry	50 00		
Household Science	75 00		
Mechanical Engineering	125 00		
Metallurgical Engineering	100 00		
Mining Engineering	200 00		
Photography	50 00		
Physics	150 00		
Physiology	150 00		
Surveying	100 00		
Royal Ontario Museum of Zoology	50 00		
		$1,900 00	
			$5,142 01

15. *Insurance.*

Balance of premiums on general schedule brought forward from 1918-19		$17,287 86	
Carried forward to 1920-21		8,643 93	
Charged to revenue 1919-20		$8,643 93	
Premiums on Hart House:			
Hartford Fire Insurance Co.	$255 23		
Liverpool, London & Globe Insurance Co.	253 85		
North British & Mercantile Insurance Co.	190 00		
Westchester Fire Insurance Co.	248 35		
Massey Foundation, unearned premiums on policies taken over	397 91		
	$1,345 34		
Charged to revenue 1919-20 (balance carried forward)		$522 01	
St. George Street Properties:			
Phœnix Assurance Co.		37 80	
Scottish Union & National Insurance Co.		30 15	
North British & Mercantile Insurance Co.		4 98	
Sundry adjustments		53 75	
2 Surrey Place:			
Alliance Assurance Co.		26 33	
1. Queen's Park:			
North British & Mercantile Insurance Co.		33 51	
Commercial Union Assurance Co.:			
Antitoxin Laboratories		407 95	
Dominion of Canada Guarantee & Accident Insurance Co.:			
Motor Truck		54 65	
Hydro-Electric Power Commission, electrical inspection		50 00	
			$9,865 06

16. *Advertising Expenses.*

General Advertising ($862.53):		
Acta Victoriana	$20 00	
Canadian Almanac	15 00	
Canadian Engineer	48 60	
Canadian Medical Association	49 98	
Catholic Year Book and Directory	15 00	
Canadian Mining Journal	45 00	
Heaton's Agency	50 00	
Public Health Journal	30 00	
The "Rebel"	20 00	
Society of American Foresters	17 52	
St. Andrew's College Review	10 00	
The "School"	50 10	
St. Michael's College Year Book	20 00	
Torontonensis, 1920	60 00	
University Magazine, Montreal	72 00	
University Y.M.C.A. Handbook	18 00	
University Monthly	200 00	
Upper Canada College Times	3 33	
The "Varsity"	75 00	
Westman Press	28 00	
Wycliffe Magazine	15 00	
Sundry announcements ($56.62):		
Evening Telegram	10 60	
Globe Printing Co.	10 12	
Mail and Empire	10 04	
Toronto Daily Star	16 96	
Toronto World	8 90	
		$919 15

17. *Aid to Publications and Societies.*

Astronomical Journal	$100 00	
Conference of Canadian Universities	50 00	
The "School"	500 00	
School of Oriental Research	100 00	
University Engineering Society	150 00	
		$900 00

18. *University Studies*

H. H. Langton, remuneration as General Editor, 12 months to 30 June	$200 00	
Printing, binding and other expenses ($1,025.15):		
Miss H Fairbairn, typing copy	90	
University Press, printing and binding	1,024 25	
Reprints ($74.11):		
Association for Study of the Internal Secretions	$19 88	
C. V. Mosby, Medical Book & Publishing Co.	28 77	
Neill & Co.	9 60	
Williams & Wilkins Co.	15 86	
Publication of Canadian Historical Review ($2,456.41):		
W. J. Dunlop, remuneration as business manager, Jan. 15 to June 30, 1920	200 00	
W. S. Wallace, editorial fee	300 00	
W. J. Dunlop, disbursements, payments to contributors, $208.00; stenographer's salary, January 19 to June 30, at $7.00 per week, $164.00; postage, $56.78; stationery, $29.00; registration of title, $25.00; multigraphing letters, $16.85; advertising commission, $12.75; sundries, $6.60	518 98	
University Press, printing	1,437 43	
Royalties ($39.22):		
M. A. Buchanan	$28 57	
M. W. Wallace	10 65	
	$3,794 89	
Less charged to Trust Funds Account	39 22	
		$3,755 67

19. *Law Costs.*

John A. Paterson, K.C., taxed costs as solicitor to the University	$1,140 37	
		$1,140 37

20. *Travelling Expenses.*

Travelling expenses of the President and Academic Staff ($1,066.28):		
R. W. Angus	$6 45	
T. H. Black	151 55	
J. A. Dale	30 00	
Sir Robert Falconer	252 65	
Duncan Graham	27 65	
V. E. Henderson	92 40	
V. J. Harding	26 15	
H. B. Maitland	67 10	
M. Moraud	38 70	
C. H. Mitchell	111 00	
J. J. Mackenzie,	27 65	
J. J. R. Macleod	27 65	
J. MacNaughton	14 00	
W. N. Millar	39 76	
A. Primrose	27 65	
E. S. Ryerson	27 65	
F. E. Wagg	5 82	
W. S. Wallace	35 20	
B. P. Watson	27 65	
D. J. Gibb Wishart	29 60	
Travelling expenses of the Board of Governors and the Senate ($138.00):		
Board of Governors:		
Judge C. G. Snider	40 00	
Members of the Senate:		
E. M. Baker	7 10	
J. H. Coyne	39 70	
Wm. Dale	18 90	
T. G. Raynor	32 30	
		$1,204 28

21. *Senate Elections.*

Preparing register of graduates ($642.80):		
Clerical assistance:		
Miss E. Alexander, 4 months at $70.00 per month	$280 00	
Miss A. Lobb, 1 month at $75.00	75 00	
Office Specialty Mfg. Co., card sections	287 80	
		$642 80

22. *Roll of Service.*

Prof. G. Oswald Smith, remuneration as editor, 12 months to 30 June	$500 00	
Clerical assistance ($1,100.00):		
Miss A. C. MacGillivray, 12 months to 30 June	1,000 00	
Miss J. Mearns, 286 hours at 35c. per hour	100 10	
Office supplies, postage, printing and incidentals ($533.48):		
The Bursar, postage supplied	255 00	
Office Specialty Mfg. Co., folders	10 50	
United Typewriter Co., repairing typewriter	8 70	
Petty items (2)	2 60	
University Press, printing and stationery	239 80	
Superintendent's Dept., labour	16 88	
		$2,133 58

23. *Alumni Association.*

W. N. MacQueen, remuneration as organizing secretary, one year to 30 June	$2,000 00	
Office and travelling expenses ($2,000.00):		
Treasurer, Alumni Association, grant as voted	2,000 00	
Deficit on University Monthly:		
Treasurer, Alumni Association, towards deficit as voted	1,300 00	
		$5,300 00
		$238,488 36

II. Faculty of Arts.

24. *Salaries.*

(1) Departments in University of Toronto ($271,367.58.)

Mathematics.

Professors, each 12 months to 30 June:		
A. T. DeLury	$4,750 00	
M. A. Mackenzie	4,500 00	
J. C. Fields	4,500 00	
Assistant Professors, each 12 months to 30 June:		
S. Beatty	3,000 00	
I. R. Pounder	2,500 00	
Fellows (Sessional):		
N. E. Sheppard	800 00	
E. O. Hall (paid also $150 in Physics)	800 00	
W. J. Lougheed, Special Instructor (Michaelmas Term—paid also $3,100 in Education)	200 00	
		$21,050 00

Mechanics.

W. J. Loudon, Professor, 12 months to 30 June	$4,750 00	
		$4,750 00

Physics.

J. C. McLennan, Professor, 12 months to 30 June	$5,000 00	
E. F. Burton, Associate Professor, 12 months to 30 June	3,600 00	
Assistant Professors, each 12 months to 30 June:		
L. Gilchrist	2,850 00	
J. Satterly, including Assistant Directorship of Undergraduate Laboratory (paid also $250 for Special Courses, Returned Soldiers)	3,500 00	
H. A. McTaggart (paid also $50 for Special Courses)	2,500 00	
Assistant Demonstrators (Sessional):		
Miss F. M. Quinlan	900 00	
Miss K. M. Crossley	600 00	
E. Evans	600 00	
Miss I. Giles	600 00	
A. C. Lewis	600 00	
Miss Isobel Mackey	600 00	
Miss H. C. Millar	600 00	
W. W. Shaver	600 00	
A. C. Sinclair	600 00	
R. V. Zumstein	600 00	
Class Assistants (Sessional):		
T. H. Milne	350 00	
J. F. T. Young	275 00	
Miss G. Chantler	225 00	
R. F. B. Cooley	225 00	
S. A. Fasken	225 00	
H. J. C. Ireton	225 00	
N. W. Reynolds	225 00	
Miss H. I. Eadie	150 00	

24. *Salaries.*—Continued.

D. W. Bates	$150 00	
H. C. Bates	150 00	
E. A. Fines	150 00	
E. O. Hall (paid also in Mathematics)	150 00	
P. Lowe	150 00	
G. M. Shrum	150 00	
J. A. Sonley	150 00	
G. A. Petrie	75 00	
E. R. I. Pratt (substitute)	66 00	
Miss A. T. Reed, Class Assistant and Secretary, 12 months' salary	1,200 00	
Miss M. E. Lowrey, Clerical Assistant (Sessional—resigned 30 April)	412 50	
Mechanicians:		
T. S. Plaskett, 12 months to 30 June (paid also $200 from Special Research)	1,700 00	
J. R. Dowdell, Assistant, 12 months to 30 June	1,100 00	
Ed. Slade, Assistant, 30 October to 11 December at $40 per month; 12 December to 30 June at $100 per month	721 32	
R. Bletcher, Assistant, 14 weeks less 2 days at $8 per week	109 20	
Glass-blowers:		
G. E. Leworthy, 4 October to 3 March at $155 per month (paid also in Applied Chemistry)	775 00	
Wm. Glennon, 22 March to 30 April	248 72	
G. Reiser, 4 weeks at $60	240 00	
F. D. Mezen, occasional services	80 60	
P. Blackman, Lecture and Laboratory Assistant, 9 months' salary	1,000 00	
		$34,428 34

Astro-Physics.

C. A. Chant, Professor, 12 months to 30 June	$4,100 00	
Assistants (Sessional):		
J. H. Horning	500 00	
F. L. Blake	100 00	
C. E. Cale	50 00	
J. A. Pearce	50 00	
		$4,800 00

Geology.

Professors, each 12 months to 30 June:		
A. P. Coleman (also Dean of Faculty)	$5,000 00	
W. A. Parks, Palaeontology	4,350 00	
A. MacLean, Assistant Professor, 12 months to 30 June	2,500 00	
Laboratory Attendants:		
J. Rickett, 22 September to 15 April at $60 per month	408 50	
C. H. Jefferson, 5 days	10 00	
		$12,268 50

Mineralogy.

T. L. Walker, Professor, 12 months to 30 June	$5,000 00	
A. L. Parsons, Associate Professor, 12 months to 30 June	3,200 00	
Ellis Thomson, Lecturer (Sessional)	2,000 00	
Henry George, Laboratory Attendant, 8 months' salary	560 00	
		$10,760 00

Chemistry.

Professors, each 12 mos. to 30 June:		
W. R. Lang, July at $3,800 per annum (war service—half pay), $158.33; from 1 August at $4,750 per annum	$4,512 50	
W. Lash Miller, Physical Chemistry	4,750 00	
F. B. Kenrick, at $4,000, of which $1,000 paid from Special Research	3,000 00	
F. B. Allan, Organic Chemistry, at $4,000, of which $1,000 paid from Special Research (paid also $150 for Special Courses)	3,000 00	

24. *Salaries.*—Continued.

Assistant Professors, each 12 mos. to 30 June:		
L. J. Rogers	$2,600 00	
J. T. Burt-Gerrans, Electro-Chemistry	2,500 00	
Lecturers (Sessional):		
W. S. Funnell	2,100 00	
W. H. Martin	2,000 00	
Assistants (Sessional):		
M. E. Smith	2,000 00	
J. E. Clark	1,500 00	
T. C. McMullen	1,500 00	
Norman A. Clark	1,500 00	
G. H. W. Lucas	900 00	
A. L. Marshall	750 00	
Miss I. Roberts at $600 (resigned 30 April)	525 00	
J. A. Wales, 1 month	175 00	
E. J. Repath, Laboratory Assistant (with rooms, heat and light, as caretaker of Chemical Building), 12 mos. to 30 June, $1,000; Lecture Assistant (Sessional), $300	1,300 00	
Laboratory Attendants:		
W. Banton, 12 mos. to 30 June	500 00	
G. Upton, 4 November to 1 June at $400 per annum	231 83	
S. King, 4 to 30 June at $400 per annum	29 82	
W. McGregor, 2½ days	3 33	
		$35,377 48

Biology.

B. A. Bensley, Professor, Zoology, 12 mos. to 30 June	$4,500 00	
Associate Professors, each 12 mos. to 30 June:		
W. H. Piersol, Histology (paid also $350 for Special Courses)	3,750 00	
E. M. Walker	3,250 00	
A. G. Huntsman, Marine Biology (without salary—paid in Medicine)	.....	
Assistant Professors, each 12 mos. to 30 June:		
W. A. Clemens, Elementary Biology (paid also $150 for Special Courses)	2,500 00	
A. F. Coventry, Vertebrate Embryology (paid also $100 for Special Courses)	2,500 00	
Lecturers (Sessional):		
E. H. Craigie, Comparative Anatomy	1,500 00	
John MacArthur, Experimental Biology	1,500 00	
W. H. T. Baillie, Histology, $1,500; war service allowance (arrears), $500; (paid also $150 for Special Courses).	2,000 00	
Miss N. Ford, Special Assistant for Household Science (Sessional)	600 00	
Class Assistants (Sessional):		
P. D. Spohn (paid also in Pharmacy)	225 00	
A. E. McCulloch	200 00	
A. G. McPhedran (also in Medicine)	200 00	
W. V. Johnston	120 00	
L. M. Murray	120 00	
A. W. Switzer	120 00	
A. Isaacson	100 00	
J. M. MacDonald	100 00	
N. F. Morrison	50 00	
N. O. Found	50 00	
F. B. Adamstone	30 00	
Miss E. Chant	20 00	
N. K. Bigelow, Assistant in Systematic Biology (10 months, half time)	500 00	
Preparators at 66c. to 75c. per hour:		
J. E. Bates, 810 hours	607 50	
G. C. Bell, 150 hours	100 00	
L. D. Croll, 18 hours	10 80	
A. Pride, Sub-Curator, Biological Museum, 12 mos. to 30 June	1,050 00	
E. B. S. Logier, Museum Assistant and Cataloguer (10 months, half time)	500 00	

24. *Salaries.*—Continued.

Miss E. Mason, Office Assistant, 12 mos. to 30 June	$800 00	
Laboratory Attendants:		
W. J. Brown, 11 mos. to 31 May at $800 per annum	733 37	
J. T. Howells, June	90 00	
B. Peters, 8 October to 31 May at $50 per month	386 29	
Miss N. C. Lawler, Secretary, 27 October to 31 July at $80 per month	653 00	
		$28,865 96

Botany.

J. H. Faull, Professor, 12 mos. to 30 June	$4,100 00	
R. B. Thomson, Associate Professor, 12 mos. to 30 June	3,600 00	
G. H. Duff, Lecturer (Sessional)	1,500 00	
Miss G. Wright, Demonstrator (Sessional)	900 00	
Fellows (Sessional):		
E. H. Moss	600 00	
I. L. Conners	500 00	
Assistants (Sessional):		
G. H. Berkeley	500 00	
A. R. Walker	500 00	
Miss M. E. Currie (Michaelmas Term—paid also $600 in Special Research)	300 00	
Miss Jean McGugan (Easter Term)	150 00	
Miss M. V. McCulloch, Technical Assistant, 12 months' salary	900 00	
A. Simpson, Gardener (with living quarters), 12 mos. to 30 June	1,200 00	
Laboratory Attendants:		
J. Tiboldo, 25 weeks at $8; 15 weeks, 6 days, at $9	342 71	
Occasional service, sundry persons	24 25	
		$15,116 96

Bio-Chemistry.

Andrew Hunter, Professor, 12 mos. to 30 June (paid also $50 for Special Courses)	$5,000 00	
H. B. Speakman, Associate Professor of Zymology (without salary; paid from Special Research)	.....	
H. Wasteneys, Assistant Professor, 12 mos. to 30 June (paid also $100 in Medicine)	3,100 00	
Miss J. McFarlane, Demonstrator (Sessional)	1,200 00	
Fellows (Sessional):		
H. C. Cruickshank	600 00	
R. W. Ian Urquhart	600 00	
Technicians:		
L. A. Ray, 11 mos. to 31 May at $1,800 (resigned)	1,650 00	
J. W. Fletcher, 1 month	100 00	
Miss M. Gould, Technical Assistant, 12 mos. to 30 June	800 00	
A. E. Giddens, Laboratory Assistant, 12 mos. to 30 June	900 00	
Miss M. Delamere, Secretarial Assistant, 12 mos. to 30 June	900 00	
		$14,850 00

Physiology.

J. J. R. MacLeod, Professor, 12 mos. to 30 June (paid also $500 for Special Lectures in Medicine)	$5,000 00	
A. C. Redfield, Assistant Professor, 12 mos. to 30 June	2,700 00	
Fellows (Sessional):		
Miss Jessie Lang	600 00	
Miss C. J. Fraser (part time)	300 00	
L. G. Kilborn (half time—paid also $270 in Special Research)	300 00	
R. S. Lang (half time—paid also $170 in Special Research)	300 00	
Mrs. M. E. McFarlane, Departmental Librarian, 12 mos. to 30 June	1,000 00	
Miss M. E. Armour, Assistant and Secretary, 12 mos. to 30 June	900 00	

24. *Salaries.*—Continued.

Mechanicians:		
F. W. Claasens, 1 to 31 July	$100 00	
H. F. Middleton, 6 weeks, 10 days, at $30 per week	222 85	
E. Brock, 26 January to 30 June at $120 per month	630 00	
F. L. Robinson, Laboratory Assistant, $1,200; Glass-blower, $150; 12 mos. to 30 June	1,350 00	
Wm. Joyce, Laboratory Assistant, 12 months' salary	900 00	
Mrs. Rachel Green, Laboratory Cleaner (part time)	344 00	
		$14,646 85

History and Ethnology.

G. M. Wrong, Professor, 12 mos. to 30 June	$5,000 00	
Associate Professors, each 12 mos. to 30 June:		
R. Hodder Williams	3,100 00	
G. M. Smith	3,100 00	
W. P. M. Kennedy, Assistant Professor, 12 mos. to 30 June	2,750 00	
W. S. Wallace, Lecturer (Sessional—part time)	850 00	
S. H. Hooke, Special Lecturer (Sessional)	750 00	
Instructors (Sessional):		
Miss M. G. Reid	1,250 00	
Miss M. Wrong (paid also $1,550 as Resident Head, University College Women's Union)	750 00	
		$17,550 00

Comparative Philology.

A. J. Bell, Professor, 12 mos. to 30 June	$750 00	
		$750 00

Italian and Spanish.

Professors, each 12 mos. to 30 June:		
M. A. Buchanan	$4,100 00	
J. E. Shaw	4,000 00	
Lecturers (Sessional):		
A. Lipari	1,800 00	
G. Patterson	1,800 00	
Instructors (Sessional):		
Joseph Pijoan	1,200 00	
M. Catalano (Honorarium)	450 00	
		$13,350 00

Philosophy.

Professors, each 12 mos. to 30 June:		
J. G. Hume, History of Philosophy	$4,750 00	
G. S. Brett, Philosophy (part time—paid also $100 in Medicine)	3,000 00	
T. R. Robinson, Assistant Professor, 12 mos. to 30 June	3,100 00	
		$10,850 00

Psychology.

C. K. Clarke, Director (without salary—paid as Dean and Professor, Faculty of Medicine)	.....	
W. G. Smith, Associate Professor, 12 mos. to 30 June	$3,250 00	
Lecturers (Sessional):		
E. A. Bott at $1,700 (war service, half pay)	850 00	
E. J. Pratt (paid also $50 in Psychiatry)	1,500 00	
Assistants (Sessional):		
W. A. Cook	200 00	
Miss Jean Masten	125 00	
T. T. Faichney	135 00	
Wm. Wilson	40 00	
Geo. C. Cooper, Mechanician, 12 mos. to 30 June	1,500 00	
		$7,600 00

24. *Salaries.*—Continued.

Political Science.

James Mavor, Professor, 12 mos. to 30 June	$5,000 00	
R. M. MacIver, Associate Professor, 12 mos. to 30 June (paid also $500 as Acting Director, Social Service Courses)	3,500 00	
S. A. Cudmore, Assistant Professor, Political Economy, at $2,750 (resigned 30 September)	687 50	
Assistant Professors, each 12 mos. to 30 June:		
W. T. Jackman, Political Economy	2,750 00	
G. E. Jackson, Economics	2,500 00	
Lecturers (Sessional):		
T. H. Black, Roman Law	2,550 00	
H. Marshall	1,500 00	
H. E. Manning (Michaelmas Term)	500 00	
D. R. Cowan at $750, of which $334 paid from Graduate Fellowship	416 00	
A. R. Clute, Federal and Constitutional Law (part time—paid also $300 in Applied Science)	600 00	
J. D. Falconbridge, Commercial and International Law (part time)	600 00	
		$20,603 50

History of Industrial Art.

C. T. Currelly, Professor, 12 mos. to 30 June (part time)	$3,750 00	
		$3,750 00

(2) Departments in University College ($103,166.50).

Greek.

Professors, each 12 mos. to 30 June:		
M. Hutton (paid also $1,250 as Principal of University College, and $100 for Special Courses for Returned Men)	$5,000 00	
A. Carruthers, Greek Literature and Archæology	4,100 00	
W. D. Woodhead, Assistant Professor, 12 mos. to 30 June (paid also $750 for Special Courses)	2,500 00	
		$11,600 00

Latin.

John Macnaughton, Professor, 12 mos. to 30 June	$5,000 00	
G. Oswald Smith, Associate Professor, 12 mos. to 30 June (paid also $500 as Editor of Roll of Service)	3,100 00	
E. A. Dale, Assistant Professor, 12 mos. to 30 June	2,750 00	
Lecturers (Sessional):		
David Duff	2,350 00	
W. G. Hardy	1,200 00	
		$14,400 00

Ancient History.

W. S. Milner, Professor, 12 mos. to 30 June	$4,750 00	
Assistant Professors, each 12 mos. to 30 June:		
A. Grant Brown	2,500 00	
C. N. Cochrane	2,500 00	
		$9,750 00

English.

Professors, each 12 mos. to 30 June:		
W. J. Alexander	$5,000 00	
D. R. Keys, Anglo-Saxon	4,100 00	
M. W. Wallace	4,100 00	
W. H. Clawson, Assistant Professor, 12 mos. to 30 June	2,600 00	
Miss M. M. Waddington, Lecturer (Sessional)	1,500 00	
Temporary Assistants (Sessional):		
Miss A. M. Lobb	1,000 00	
Miss G. I. Wookey	1,000 00	
H. K. Gordon	124 50	
		$19,424 50

24. *Salaries.*—Continued.

French.

Professors, each 12 mos. to 30 June:		
J. Home Cameron	$4,350 00	
J. S. Will	4,100 00	
St. Elmo de Champ, Associate Professor, 12 mos. to 30 June	3,750 00	
Assistant Professors, each 12 mos. to 30 June:		
F. C. A. Jeanneret (paid also $650 as Registrar of University College)	2,500 00	
M. Moraud	2,500 00	
H. S. McKellar (Sessional)	2,000 00	
Instructors (Sessional):		
P. Balbaud (Honorarium)	800 00	
W. J. McAndrew	400 00	
L. A. Bibet (part time)	200 00	
G. H. Unwin, at $800 (resigned 31 December)	300 00	
Guy de Lestard (Easter Term)	192 00	
F. Owen (Easter Term—paid also $1,935 for Special Courses)	150 00	
		$21,242 00

German.

G. H. Needler, Professor, 12 mos. to 30 June	$4,500 00	
Barker Fairley, Associate Professor, 12 mos. to 30 June	3,500 00	
G. E. Holt, Lecturer (Sessional—paid also $100 for Special Courses)	1,750 00	
		$9,750 00

Oriental Languages.

Professors, each 12 mos. to 30 June:		
W. R. Taylor	$4,350 00	
J. A. Craig	4,100 00	
W. A. Irwin, Lecturer (Sessional)	1,500 00	
		$9,950 00

Ethics.

F. Tracy, Professor, 12 mos. to 30 June	$4,350 00	
		$4,350 00

University College, General.

M. Hutton, Principal, 12 mos. to 30 June (paid also in Greek)	$1,250 00	
F. C. A. Jeanneret, Registrar, 12 mos. to 30 June (paid also in French)	650 00	
Miss C. Tocque, Registrar's Clerk, 12 mos. to 30 June	800 00	
		$2,700 00
		$374,534 08

26. *Main Building.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($41.71):		
Consumers' Gas Co.	$41 71	
Water ($82.53):		
City Treasurer	82 53	
Caretaker's supplies ($493.57):		
Superintendent's Dept., labour, $13.81; material, $479.76	493 57	
Cleaning ($3,392.99):		
Allen Mfg. Co., laundry	16 94	
Canadian Cleaning Co., cleaning windows	60 00	
Superintendent's Dept., labour	3,316 05	

26. *Main Building.*—Continued.

Repairs and renewals ($5,987.82):		
Wm. Bartlett & Sons, shades	$47 01	
Bell Telephone Co., moving phones	9 00	
Italian Mosaic & Marble Co., cement	18 55	
A. Matthews Ltd., repairing roof	121 69	
Office Specialty Mfg. Co., desks	270 00	
Routery Bros., plastering	17 80	
University Press, name plates	10 50	
Superintendent's Dept., labour, $3,320.62; material, $2,172.65	5,493 27	
Sundries, various alterations and rearrangement of rooms ($3,954.61):		
Wm. Bartlett & Sons, shades	46 97	
R. Robertson & Sons, shades	194 70	
Routery Bros., lathing and plastering	152 68	
Superintendent's Dept., labour, $2,549.17; material, $1,011.09	3,560 26	
Seating and desks for additional lecture rooms ($2,405.00):		
McKay School Equipment Co.	2,405 00	
Rooms for Women's Administrative Council ($316.71):		
Office Specialty Mfg. Co., desk	48 00	
Superintendent's Dept., labour, $106.92; material, $161.79	268 71	
	$16,674 94	
Less sundry credits	51 65	
	$16,623 29	
Janitor, C. E. Bradshaw, 12 mos. to 30th June	$1,250 00	
Messenger Service:		
At $6.50 to $12.00 per week:		
Jack Cohen, 19 weeks, 1 day	153 14	
Teresa Howell, 12 days	22 00	
Annie E. Fleming, 30 weeks, 5 days	220 00	
Mercedes Johnston, 10 weeks, 3 days	67 79	
Thos. Lister, 38 weeks, 4 days	301 67	
Lillian Loudon, 2 weeks, 4 days	29 33	
Bernice Mitz, 16 weeks, 4 days	196 86	
Robt. Oullahan, 29 weeks, 2 days	227 67	
Messengers' car fares, etc.	20 00	
		$19,111 75

27. *Biological Building and Department.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($121.02):		
Connell Anthracite Mining Co., fuel	$39 76	
Consumers' Gas Co.	81 26	
Water ($75.58):		
City Treasurer	75 58	
Caretaker's supplies ($220.69):		
Superintendent's Dept., labour, $5.04; material, $215.65	220 69	
Cleaning ($878.81):		
Canadian Cleaning Co.	40 00	
Superintendent's Dept., labour	838 81	
Repairs and renewals ($1,083.77):		
Wm. Bartlett & Sons, shades	95 66	
City Treasurer, elevator license	5 00	
A. Matthews, Ltd., repairs	41 71	
R. Robertson & Sons, digging drain	9 10	
Routery Bros., plastering	33 83	
University Press, name plate	1 00	
Superintendent's Dept., labour, $709.09; material, $188.38	897 47	
	$2,379 87	
Less sundry credits, cleaning, $29.20; repairs, $8.25	37 45	
	$2,342 42	

27. *Biological Building and Department.*—Continued.

Caretaker, D. J. Clark (with rooms, heat and light), 12 mos. to 30th June	$1,000 00	
Cleaner, Anatomical Section, R. Eades, 12 mos. to 30th June (paid also in Anatomy)	486 63	
		$3,829 05
(*b*) Maintenance of Department:		
Laboratory and Lecture Room supplies ($578.30):		
Art Metropole, tacks	$14 91	
Beaver Flint Glass Co., supplies	10 44	
W. R. Brock Co., cloth	28 19	
John Bunn, rabbits	10 00	
J. Coulter Co., boxes	32 00	
T. Eaton Co., linen	2 75	
Freyseng Cork Co., corks	9 00	
Ingram & Bell, chemicals	5 80	
Lyman Bros. & Co., drugs	4 37	
Miller Mfg. Co., coats	36 00	
Photography, Dept. of, slides	12 15	
Sanderson, Pearcy & Co., beeswax	4 50	
Students' Book Dept., books	4 50	
Toronto Dog & Cat Hospital, animals	15 00	
The Will Corporation, chemicals, etc.	156 54	
University Press, printing and stationery	52 60	
Freight charges	117 20	
Superintendent's Dept., labour, $8.93; material, $3.42; automatic telephone, $50.00	62 35	
Museum specimens, supplies and catalogue ($111.88):		
E. B. S. Logier, extra work preparing animals for Royal College of Dental Surgeons	25 00	
P. Wytsman, specimens	60 78	
Superintendent's Dept., labour, $20.21; material, $5.89.	26 10	
Marine and Lake Laboratories ($150.00):		
Prof. E. M. Walker, expenses	150 00	
Students' Laboratory supplies ($1,954.20):		
Alien Property Custodian, account Klönne & Müller...	168 72	
Allen Mfg. Co., laundry	2 91	
Art Metropole, tacks	5 49	
Brown Bros., stationery	4 20	
D. Clark, worms	6 00	
Wm. Croft & Sons, needles	21 00	
T. Eaton Co., glasses	6 48	
J. F. Hartz Co., supplies	402 46	
G. M. Hendry, bottles	24 70	
Ingram & Bell, filter paper, chemicals	6 83	
Lyman Bros., supplies	105 14	
Lyons & Marks, tumblers	6 50	
M. Jean Mantaudon, books	2 67	
Marine Biological Laboratory, material	146 31	
New Jersey Entomological Co., eggs	4 23	
Powers & Powers, slides	8 50	
Richards Glass Co., tubes	20 90	
Rochester Chemical Products Co., acid	10 61	
Sanderson, Pearcy & Co., beeswax, etc.	26 13	
Toronto Dog & Cat Hospital, animals	308 72	
Ward's Natural Science Establishment, fossils	16 43	
Will Corporation, test tubes, etc.	167 32	
W. Lloyd Wood, alcohol	26 03	
University Press, printing and stationery	398 05	
Freight charges	42 57	
Superintendent's Dept., material	15 30	
New microscopes and apparatus ($2,053.25):		
W. E. Dillon, trays	56 25	
Ingram & Bell, forceps	23 86	
F. R. Lockhart, repairs to camera	5 00	
Spencer Lens Co., microscopes and supplies	1,964 49	
Superintendent's Dept., labour, $3.20; material, 45c....	3 65	

27. *Biological Building and Department.*—Continued.

Furnishings, fittings and new equipment ($1,931.81):			
Canada Furniture Mfrs., Ltd., chairs		$23 23	
T. Eaton Co., supplies		57 85	
Office Specialty Mfg. Co., desks		176 14	
C. H. Robinson, cushions		15 00	
Superintendent's Dept., labour, $1,062.79; material, $596.80		1,659 59	
Incidentals and clerical assistance ($345.53):			
Allen Mfg. Co., laundry		50 64	
Prof. B. A. Bensley, disbursements:			
Laboratory supplies, $24.75; office supplies, $16.02; animals and food, $3.35; car fares, $2.50; advertising and sundries, $3.38		50 00	
The Bursar, postage supplied		9 50	
T. Eaton Co., cabinet		6 00	
Lyman Bros., drugs		3 14	
Miss B. Sifton, clerical assistance, 51 lectures at $2 per lecture, $102.00; stenographical assistance from October 6th to November 26th, $42.00		144 00	
Students' Book Dept., book		40 00	
Toronto Dog & Cat Hospital, animals		2 85	
Toronto Produce Co., fodder		4 70	
United Typewriter Co., inspection		7 50	
University Press, printing and stationery		18 25	
Petty items (4)		7 35	
Superintendent's Dept., material		1 60	
Wiring in Laboratory ($381.79):			
Superintendent's Dept., labour, $163.95; material, $217.84		381 79	
Messenger service ($196.25):			
John Fricker, 7½ weeks at $7.50 per week....	$56 25		
John Bunn, 18 weeks, 4 days at 7.50 per week.	140 00		
		196 25	
		$7,703 01	
Less sundry credits:			
Royal College of Dental Surgeons, for embalming animals	$93 00		
Sale of barrels	19 14		
		112 14	
			$7,590 87
			$11,419 92

28. *Sub-Department of Botany.*

Apparatus and equipment ($1,235.82):	
J. F. Hartz Co., surgical instruments	$40 82
Kny Scheerer Corporation, forceps	6 70
W. R. McKee, repairs to microscope	2 00
Spencer Lens Co., microscope, etc.	253 09
Prof. R. B. Thomson, petty disbursements	3 85
Topley Co., glassware, etc.	642 21
H. C. Tugwell Co., photographic supplies	55 85
University Press, printing	68 20
Freight charges	44 99
Superintendent's Dept., labour, $76.71; material, $41.40...	118 11
Laboratory and office supplies ($1,010.23):	
Beaver Flint Glass Co., glassware	12 16
The Bursar, postage supplied	25 00
G. H. Duff, disbursements:	
Laboratory supplies, $20.55; sundries, $4.17	24 72
T. Eaton Co., cotton, etc.	12 96
J. H. Faull, petty disbursements	10 48
J. F. Hartz Co., chemicals, etc.	88 13
Thos. J. Lane, tins	2 90
Lyman Bros. & Co., drugs	8 81
Marine Biological Laboratories, subscription	8 15

28. *Sub-Department of Botany.*—Continued.

Parke, Davis & Co., slides	$7 75
Plant Study Co., plants, etc.	12 34
Telfer Mfg. Co., cases	27 50
Prof. R. B. Thomson, disbursements: Laboratory supplies, $21.43; postage and car fare, $13.65; subscriptions, $5.16; telephone calls, $3.08; office supplies and sundries, $8.79	52 11
Topley Co., instruments and chemicals	377 64
Toronto Produce Co., fodder	3 85
H. C. Tugwell Co., photographic supplies	7 00
United Typewriter Co., inspections	4 50
University Press, printing and stationery	218 70
Mrs. Geo. Ward, towels	7 15
Petty items (3)	3 82
Freight charges	56 74
Superintendent's Dept., labour, $3.76; material, $34.06	37 82
Museum and Herbarium supplies ($470.61):	
E. Bartholomew, subscriptions	17 18
F. S. Collins, subscriptions	6 28
T. Eaton Co., cotton	3 96
Kny Scheerer Corporation, mounts	23 67
R. Laidlaw Lumber Co., door	5 00
Rudd Paper Box Co., boxes	75 00
Topley Co., jars	12 00
Freight charges	5 24
Superintendent's Dept., labour, $175.02; material, $147.26.	322 28
Clerical assistance and assistance in Museum and Herbarium ($749.95):	
Miss H. M. Chute, 1 month at $100.00	100 00
Miss I. Underhill, 703 hrs. at 45c., $316.35; 556 hrs. at 60c., $333.60	649 95
Botanic Garden and Greenhouse supplies, material and labour in connection ($2,342.75):	
Aggeler & Musser Seed Co., seed	2 35
Bio-Chemistry Dept., cages, mice, etc.	16 70
The Bursar, postage supplied	15 00
W. Calder & Son, tools	8 50
Campbell Bros., bulbs	5 25
Fred. Carr, seed	3 00
T. Eaton Co., wheelbarrow, etc.	7 35
F. J. Grootendorst & Sons, plants	89 59
Lord & Burnham, greenhouse materials	131 00
T. Manton, flowers	4 00
New York Botanical Garden, book	11 71
Ontario Lime Co., cement	13 30
Pedlar People, metal lath	5 44
A. H. Richardson, seed collecting	11 71
J. A. Simmers, rake, etc.	6 65
Prof. R. B. Thomson, disbursements: Flowers and seeds, $10.70; travelling expenses, $8.90; supplies and sundries, $27.03; less credit, $2.00	44 63
W. H. Thomson, hauling clay	9 00
Toronto Produce Co., fodder	32 05
Freight charges	11 98
Superintendent's Dept., labour, $45.64; material, $69.90	115 54
C. Carnegie, 153 hours at 48c. per hour	73 44
J. Currie, 44 hours at 48c.	21 12
L. Dolphin, 44 hours at $22.00 per week	22 00
C. Gray, 2 weeks at $80.00 per month, $40.00; 96 hours at 48c., $46.08	86 08
E. Halcomb, 48 hours at 48c.	23 04
W. Hirons, 52 hours at 48c., $24.96; 10 weeks at $24.00, $240.00	264 96
F. Hitchcock, 2,240⅓ hrs. at 48c. per hour	1,075 36
Miss C. S. McCulloch, 50 hrs. at 50c.	25 00
Miss M. V. McCulloch, 1 month at $75.00	75 00
W. Stovold, 6 months at $22.00	132 00

28. *Sub-Department of Botany.*—Continued.

Repairs to Greenhouse ($400.13):			
Ontario Lime Co., cement		$133 42	
Superintendent's Dept., labour, $115.23; material, $150.98.		266 71	
New Botanic Garden Scheme ($652.38):			
L. W. Brownell, slides		6 01	
B. Cairns, stamps		2 00	
Hart House, luncheon to meeting of promoters		100 00	
W. D. Hirons, 42 hours at 50c.		21 00	
F. Hitchcock, 36 hours at 48c.		17 28	
Thos. J. Lane, trees		33 07	
Northern Taxi Cab & Auto Livery, rent of car		17 00	
Photography, Dept. of, slides		3 75	
Ryder & Sons, seeds		22 75	
A. Simpson, travelling expenses to U. S. gardens		150 00	
Prof. R. B. Thomson, disbursements:			
Rent of car, $66.35; travelling expenses, $34.90; rent of typewriter, $21.67; stenographic assistance, $20.00; newspapers, $8.74; telegrams and telephone calls, $8.42; entertainment of visitors, $8.00; sundries, $21.66		189 74	
Sundry newspapers, announcements		29 23	
University Press, printing and stationery		50 05	
Superintendent's Dept., labour, $8.45; long distance telephone calls, $2.05		10 50	
		$6,861 87	
Less received from breakages	$4 80		
Students' Laboratory, deposits transferred	66 00		
		70 80	
			$6,791 07

29. *Department of Bio-Chemistry.*

Maintenance, laboratory and office supplies ($2,248.71):		
Anglers Co., frogs	$8 17	
Art Metropole, paper	3 43	
Belding Paul Corticelli, Ltd., silk	12 50	
T. Eaton Co., supplies	75 11	
G. Ferguson, meat	15 50	
Grand & Toy, transfer cases, etc.	95 55	
Grasselli Chemical Co., acid	34 38	
Harris Abattoir Co., meat	23 03	
J. F. Hartz Co., chemicals	64 58	
Hooper Co., Ltd., chemicals	20 00	
Prof. A. Hunter, disbursements:		
Laundry, $42.42; laboratory supplies, $39.61; car fare and postage, $10.67; office supplies and sundries, $7.30	100 00	
Kehoe & Keogh, saucepans, etc.	20 06	
Lake Simcoe Ice Supply Co., ice	96 25	
Lyman Bros. & Co., drugs	6 18	
McKay School Equipment Co., flasks, chemicals, etc.	735 85	
Mortimer Co., printing	12 73	
Richards Glass Co., glassware	369 31	
F. Simpson & Sons, provisions	21 10	
Students' Book Dept., books	8 50	
Tablet & Ticket Co., letters and figures	23 60	
United Typewriter Co., typewriter and inspection	114 60	
University Press, printing and stationery	136 40	
Petty items (5)	7 76	
Freight charges	17 76	
Superintendent's Dept., labour, $136.15; material, $90.21.	226 36	
Apparatus ($2,019.18):		
Andrew H. Baird, calorimeters	149 12	
Campbell Flour Mills, barley	35 00	
Central Scientific Co., heater	40 50	

29. *Department of Bio-Chemistry.*—Continued.

Wm. Gairtner & Co., clamps, etc.		$112 54	
Emil Greiner Co., pipettes, etc.		71 14	
McKay School Equipment Co., apparatus		796 10	
Richards Glass Co., water bottles		12 00	
C. M. Sorensen Co., calorimeters, etc.		119 44	
Thermal Syndicate, Ltd., test tubes		19 32	
Torsion Balance Co., scales		122 78	
University of California, distilling apparatus, etc.		420 92	
Victor Electric Co., tuner		5 74	
Freight charges		2 12	
Superintendent's Dept., labour, $56.77; material, $55.69		112 46	
Fitting up New Laboratory ($1,511.34):			
Superintendent's Dept., labour, $897.70; material, $613.64		1,511 34	
Renovating Laboratory Rooms ($447.65):			
Superintendent's Dept., labour, $317.40; material, $130.25		447 65	
		$6,226 88	
Less sundry credits:			
Antitoxin Laboratory	$34 10		
Botanical Dept.	16 70		
Pathological Dept.	24 70		
Refund (damages)	15 80		
		91 30	
			$6,135 58

30. *Physiological Department.*

Laboratory and office supplies ($2,205.39):		
Aikenhead Hardware Co., hardware	$103 54	
Anglers Co., frogs	195 53	
Armstrong Cork & Insulator Co., cork	3 00	
Association for Study of the Internal Secretions, pamphlets	2 47	
S. Bateman, animals	18 00	
Booth-Coulter Copper & Brass Co., brass	5 85	
Canada Hardware Co., hardware	25 25	
Canadian Independent Telephone Co., cord	16 00	
Canadian Johns-Manville Co., fibre wood	8 87	
F. Cruickshanks, cats	3 75	
Wm. Davies Co., meat	21 90	
T. Eaton Co., supplies	105 28	
Wm. Gaertner & Co., reading device	3 72	
G. E. Groves, keys	5 00	
Harrison & Sons, books	4 51	
Harvard Apparatus Co., electrodes	15 38	
G. M. Hendry & Co., lantern	60 00	
Independent Lamp & Wire Co., lamps	10 21	
Ingram & Bell, supplies	127 95	
L'Air Liquide Society, oxygen	3 00	
Longmans, Green & Co., book	3 47	
J. T. W. Low, webbing	6 50	
Geo. Lugsden & Co., felt	1 95	
Lyman Bros., drugs	40 74	
Prof. J. J. R. Macleod, disbursements: Chemicals and laboratory supplies, $44.12; animal food, $38.00; laundry, $37.93; car fares and postage, $16.89; hardware, $12.71; sundries, $16.00	165 65	
McAinsh Co., Ltd., book	4 00	
McKay School Equipment Co., supplies	30 65	
Michie & Co., biscuits	7 10	
Militia & Defence Dept., chemicals	118 94	
James Morrison Brass Co., castings	68 76	
O'Keefe Brewery, water	5 00	
Chas. Potter, slides	3 20	
Photography, Dept. of, slides	7 45	
Pratt & Whitney Co., hollow mill	1 26	
Rice, Lewis & Son, hardware	2 70	

30. *Physiological Department.*—Continued.

Richards Glass Co., stop cocks	$8 70	
Ryrie Bros., watch	12 00	
Sadlar & Howarth, belting	3 38	
Jas. Sherman, care of animals	20 00	
Students' Book Dept., books	16 95	
Synthetic Drug Co., mercury	25 00	
Tablet & Ticket Co., letters and figures	2 69	
Toronto Dog & Cat Hospital, animals	370 90	
Toronto Produce Co., fodder, etc.	135 00	
United Typewriter Co., inspection and supplies	9 50	
Williams & Wilkins, reprints	2 18	
University Press, printing and stationery	91 60	
Freight charges	41 55	
Superintendent's Dept., labour, $27.04; material, $82.32; automatic telephones, $150.00	259 36	
Apparatus ($480.52):		
Aikenhead Hardware Co., hardware	51 68	
Baird & Tatlock (London), Co., glass tubing	159 75	
Harvard Apparatus Co., screw, stands, etc.	49 88	
Ingram & Bell, apparatus	106 41	
Synthetic Drug Co., gas apparatus	7 50	
A. H. Thomas Co., thermometer	61 40	
Superintendent's Dept., labour, $3.63; material, $40.27	43 90	
New Animal House ($335.87):		
Asphaltic Concrete Co., concrete floor	50 00	
Wm. Fenton, erecting storage house	221 50	
Superintendent's Dept., labour, $43.85; material, $20.52	64 37	
Alterations in Laboratory ($245.52):		
Superintendent's Dept., labour, $81.57; material, $163.95	245 52	
		$3,267 30

31. *Chemical Building and Department.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($282.62):		
Consumers' Gas Co.	$282 62	
Water ($120.67):		
City Treasurer	120 67	
Caretaker's supplies ($171.20):		
Superintendent's Dept., labour, $2.96; material, $168.24	171 20	
Cleaning ($1,099.95):		
Allen Mfg. Co., laundry	5 65	
Canadian Cleaning Co., cleaning windows	20 00	
Superintendent's Dept., labour	1,074 30	
Repairs and renewals ($848.25):		
Wm. Bartlett & Son, shades	4 00	
A. Matthews, Ltd., ventilating pipes	49 00	
R. Robertson & Son, repairs	4 65	
Superintendent's Dept., labour, $498.76; material, $291.84	790 60	
Sundries:		
New floor and drainage in basement ($500.01): Superintendent's Dept., labour, $260.29; material, $239.72	500 01	
	$3,022 70	
Less received from St. Andrew's College for use of chemical laboratory, $100.00; of which $25 paid to E. J. Repath and $50.00 to J. Handford, for extra work	25 00	
		$2,997 70
(*b*) Maintenance of Department:		
Chemicals, glassware and apparatus ($3,229.86):		
Aikenhead Hardware Co., hardware	$17 48	
Applied Chemistry Dept., chemicals	25 00	

31. *Chemical Building and Department.*—Continued.

Art Metropole, brushes, etc.		$45 63	
Associated Industries of Japan, burettes		25 00	
J. T. Baker Chemical Co., chemicals		469 08	
Beaver Flint Glass Co., tubes		125 50	
F. E. Becker & Co., weights		189 74	
Geo. Brimston, keys		39 25	
The Bursar, postage supplied		15 00	
Canadian Carbonate Co., gas		9 00	
Canadian Kodak Co., photographic supplies		10 00	
Canadian Laboratory Supplies, burettes		7 50	
T. Eaton Co., towels, etc.		23 86	
Eastman Kodak Co., chemicals, etc.		237 59	
E. B. Eddy Co., matches		22 65	
Eimer & Amend, chemicals		187 31	
E. & A. Gunther, glasses		10 00	
A. Gallankamp & Co., paper and freight		397 24	
Ingram & Bell, chemicals		11 00	
Lake Simcoe Ice Supply Co., ice		10 10	
Lester Storage & Cartage Co., cartage		4 40	
L'Air Liquide Society, oxygen		26 13	
Lyman Bros. & Co., drugs		130 06	
H. W. McCurdy, silver		31 70	
Prof. W. Lash Miller, disbursements: Laboratory supplies, $26.11; hardware, $4.76; telegrams, etc., $6.56; sundries, $12.54		49 97	
McKay School Equipment Co., crucibles, flasks, tubing, etc.		1,015 85	
New York Thermometer Co., thermometers		64 30	
F. Price Noble, stop cocks		39 53	
Ontario Cork Co., corks		59 25	
Ontario Rubber Co., tubing		4 50	
Richards Glass Co., bottles		6 00	
Ryrie Bros., watch		12 00	
Scientific Materials Co., crucibles, etc.		195 81	
Shawinigan Electro-Metals Co., powder		11 70	
Students' Book Dept.		2 20	
L. S. Tarshis & Sons, balances		20 00	
A. H. Thomas Co., glassware, etc.		670 04	
Frank Wehrle, brushes		69 90	
White & Thomas, sand baths		16 60	
University Press, stationery and printing		297 45	
Freight charges		65 49	
Superintendent's Dept., labour, $212.09; material, $180.96; automatic telephones, $200.00		593 05	
		$5,263 86	
Less received from Students' Account....	$2,000 00		
Sundry credits	34 00		
		2,034 00	
		$3,229 86	
Fitting up New Laboratories ($6,451.32):			
Detailed in last year's report		$3,003 45	
A. Matthews, Ltd., coating drains		15 93	
Superintendent's Dept., labour, $1,910.31; material, $1,521.63		3,431 94	
			$9,681 18
			$12,678 88

32. *Sub-Department of Physical Chemistry.*

Chemicals, apparatus and maintenance ($580.27):		
Baird & Tatlock, Ltd., oven, etc.	$73 24	
Bausch & Lomb Optical Co., lamps	8 29	
Canadian General Electric Co., motor	47 26	

32. *Sub-Department of Physical Chemistry.*—Continued.

Edison Swan Electric Co., lamps	$17 39	
E. B. Eddy Co., matches	21 00	
Hanovia Chemical & Mfg. Co., bulbs	16 92	
Ontario Rubber Co., tubing	116 93	
Photography, Dept. of, slides	6 00	
Thermo Electric Instrument Co., oven	259 06	
Freight charges	8 79	
Superintendent's Dept., labour	5 39	
		$580 27

33. *Physics Building and Department.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($215.47):		
Consumers' Gas Co.	$215 47	
Water ($407.99):		
City Treasurer	407 99	
Caretaker's supplies ($149.00):		
Superintendent's Dept., labour, $4.41; material, $144.59	149 00	
Cleaning ($1,198.06):		
Canadian Cleaning Co., cleaning windows	45 40	
Superintendent's Dept., labour	1,152 66	
Repairs and renewals ($1,450.82):		
Wm. Bartlett & Sons, shades	10 96	
City Treasurer, elevator license	5 00	
Johnson Temperature Regulating Co., supplies	41 11	
R. Robertson & Sons, repairs	99 60	
Superintendent's Dept., labour, $908.87; material, $385.28	1,294 15	
	$3,421 34	
Less sundry credits, cleaning	37 50	
	$3,383 84	
Caretaker, J. Wicksey, 12 mos. to 30 June	1.200 00	
		$4,583 84
(*b*) Maintenance of Department:		
Laboratory and workshop supplies ($2,929.09):		
Aikenhead Hardware Co., hardware	$184 45	
Baines & Peckover, steel	11 28	
H. Bakewell, repairs to clock	3 50	
Beardmore Belting Co., belting	4 89	
British Aluminium Co., rod	6 87	
British American Oil Co., oil and grease	4 11	
Bureau of Standards, Washington, lamps	7 92	
The Bursar, postage supplied	34 00	
Prof. E. F. Burton, disbursements:		
Laboratory supplies, $18.14; hardware, $6.56; telegrams, $6.04; car fare, $4.00; sundries, $5.04.	39 78	
Cambridge & Paul Instrument Co., repairs to spirit level	24 91	
Canada Metal Co., lead pipe	5 13	
Canadian Carbonate Co., gas	8 10	
Canadian Kodak Co., X-ray plates	8 40	
Central Electric Supply Co., electrical supplies	48 79	
Cooper Hewitt Electric Co., lamp tubes	143 90	
Copp Clark Co., stationery	13 85	
Dean Bros., bronze castings	26 70	
T. Eaton Co., supplies	60 90	
Edison Swan Electric Co., Pointolite lamp, etc.	121 19	
Eimer & Amend, chemicals	16 00	
P. W. Ellis, solder and set of screwdrivers	4 80	
E. Greenwood, repairs to watches	8 00	
J. J. Griffin, goniometer, etc.	39 49	
G. M. Hendry Co., supplies	75 15	

33. *Physics Building and Department.*—Continued.

Wm. Hiergisell & Co., thermometer	$47 33
Adam Hilger Co., mirrors, glass, etc.	79 65
Ingram & Bell, X-ray plates, etc.	51 80
A. H. Winter Joyner, meter ranges	41 04
Kimble Glass Co., tubing, etc.	26 36
Keuffel & Esser Co., slide rulers	105 00
L'Air Liquide Society, oxygen	8 50
Lake Simcoe Ice Supply Co., ice	45 03
Lever Bros., oxygen	44 00
Lyman Bros., drugs	154 30
N. Macdonald, sand	4 83
New Method Laundry Co., laundry	29 04
Office Specialty Mfg. Co., stand for typewriter	16 50
Ontario Rubber Co., tubing	68 52
Pathological Dept., methylated spirits	5 54
Chas. Potter, carbon	16 75
W. G. Pye & Co., thermometer	223 23
Queen City Glass Co., glass	16 16
J. G. Ramsay & Co., plates, etc.	37 63
Ryrie Bros., repairing watch	6 00
Standard Foundry Co., castings	26 42
Synthetic Drug Co., drugs	22 82
Temple-Pattison Co., dental supplies	7 45
Thermos Bottle Co., filler	6 43
United Typewriter Co., inspection and supplies	26 84
White & Thomas, copper vessel	8 50
Wireless Press, printing	6 14
University Press, stationery and printing	293 46
Petty items (13)	25 44
Freight charges	25 10
Superintendent's Dept., labour, $102.30; material, $298.87; automatic telephones, $150.00	551 17
Apparatus ($4,055.37):	
Beardmore Belting Co., belting	7 38
J. B. Bradshaw, grating	398 58
Cambridge & Paul Instrument Co.	8 77
Canadian Kodak Co., Ltd., filters	51 00
Case Research Laboratory, dyscrasite tube	43 12
Consolidated Optical Co., lens	4 35
G. Cussons, Ltd., crane, etc.	85 31
Chas. E. Good Engineering Co., battery, etc.	42 50
W. E. Gurley, graduated vials	18 46
G. M. Hendry Co., crucibles, etc.	17 41
Adam Hilger & Co., rack, etc.	14 93
Ilford Ltd., plates	37 97
L. E. Knott Apparatus Co., burettes	9 44
L'Air Liquide Society, oxygen	30 00
W. E. Pain & Sons, prisms	116 06
W. G. Pye & Co., lenses, batteries, etc.	878 61
Richards Glass Co., blow pipe	18 00
Russell & Shaw, crystals, etc.	25 67
Geo. Sparrow & Co., boiler	11 50
Tremont Rotary Power Co., vacuum pipe	240 52
Freight charges	80 59
Superintendent's Dept., labour, $1,653.46; material, $261.74	1,915 20
Experimental tables, cases, books, charts, etc. ($1,150.62):	
Cambridge Scientific Instrument Co., copies	2 80
Canadian Office Appliance & Supply Co., peerless keys, etc.	22 50
College Auction Mart, book-case	18 00
T. Eaton Co., chairs, etc.	249 01
G. M. Hendry Co., supplies	63 14
MacMillan Co., subscription	9 35
Office Specialty Mfg. Co., sundries	73 85
Presbyterian Publications, slides	31 85

33. *Physics Building and Department.*—Continued.

Students' Book Dept., books, etc.	$17 80	
Taylor & Francis, copies of magazine	18 66	
University Press, printing	60 05	
Superintendent's Dept., labour, $388.48; material, $195.13	583 61	
Workshop assistance ($1,678.43):		
R. Bletcher, 12 weeks at $8.00, $96.00; 2 weeks at $9.00, $18.00	114 00	
H. Franklin, 40 hours at 90c., draughting	36 00	
A. Gibson, 1 week, ½ day, at $9.50 per week	9 82	
Mrs. McKay, typewriting, 4 days at $4.00	16 00	
R. Mowat, 7 weeks, 1 day, at $8.00 per week, $57.45; 20 weeks at $9.00, $180.00; 6 weeks at $10.00, $60.00	297 45	
H. Ryder, typewriting, 4 days at $3.00	12 00	
Jas. Ward, 5 months at $140.00, $700.00; 1 week at $35.00, $35.00; 22½ hours at 62c., $13.92	748 92	
M. Winterbottom, clerical assistance at $5.00 per day	35 00	
Jno. Young, 2 months, 28 days, at $140.00 per month	409 24	
		$9,813 51
		$14.397 35

34. *Sub-Department of Astro-Physics.*

Maintenance ($281.63):		
Prof. G. R. Anderson, cinema exhibit	$11 15	
Canada Metal Co., castings	20 50	
Canadian National Carbon Co., cells	9 10	
Prof. C. A. Chant, disbursements	5 21	
C. F. Cole Co., drawing instruments	23 73	
T. Eaton Co., towels	12 75	
Lyman Bros. & Co., drugs	19 70	
Photography, Dept. of, slides	11 45	
J. G. Ramsey & Co., photographic supplies	11 31	
Students' Book Dept., books	5 25	
University Press, printing, stationery, etc.	63 95	
Petty items (4)	8 74	
Freight charges	19 77	
Superintendent's Dept., labour, $8.59; material, 43c.; automatic telephone, $50.00	59 02	
Apparatus ($520.78):		
Aikenhead Hardware Co., hardware	5 85	
Aktiabolaget Navigationsur, solar clock	100 02	
Edgar Fleming, slides	12 50	
Garage Supply Co., bearings	7 35	
Adam Hilger, Ltd., resin	44 21	
W. K. Simpson, work on sphere	45 00	
Topley Co., binocular	126 00	
Dr. Wm. Wilson, model	115 00	
A. H. Young, frames	7 85	
Superintendent's Dept., labour, $33.74; material, $23.26	57 00	
		$802 41

35. *Geological Department.*

Maintenance ($419.19):		
Art Metropole, brushes, etc.	$6 44	
Consolidated Optical Co., transit	10 00	
Grand & Toy, Ltd., stationery	8 40	
C. W. Gilmore, ivory, etc.	119 92	
S. W. McCoolie, postage	7 72	
North Carolina Geological and Economic Survey, subscription	4 55	
Office Specialty Mfg. Co., cards	11 80	
Photography, Dept. of, slides, etc.	49 70	
Prof. W. A. Parks, petty disbursements	9 23	
Students' Book Dept., note-books	11 20	
Telfer Mfg. Co., trays	51 03	
C. Tarling Map Mounting Co., mounting	8 40	
University Press, printing and stationery	86 35	
Petty items (3)	6 90	

35. *Geological Department.*—Continued.

Freight charges	$9 93	
Superintendent's Dept., labour, $3.14; material, $14.48	17 62	
Artists' Services ($459.00):		
W. Frost, drawings	390 00	
E. B. S. Logier, drawings	49 00	
G. R. Workman, drawings	20 00	
	$878 19	
Less received from students for breakages	20 90	
		$857 29

36. *Mineralogical Department.*

Maintenance, supplies and apparatus:		
Allen Mfg. Co., laundry	$6 43	
Art Metropole, scales	4 53	
Bausch & Lomb Optical Co., slides	5 02	
J. Bishop & Co., wire	5 88	
Durand Plating Co., plating	5 00	
Eimer & Amend, bottles	10 70	
Lyman Bros. & Co., drugs	19 64	
McKay School Equipment Co., chemicals	30 51	
Henry Montgomery Estate, per National Trust Co., platinum	13 80	
Norton Co., alundum	4 99	
Ontario Rubber Co., tubing	6 79	
G. W. Perkins, cutting and polishing machine	192 48	
Ritchey Supply Co., alundum	5 58	
Sauveur & Boylston, dishes, etc.	4 33	
W. K. Simpson, steel, etc.	5 00	
Students' Book Dept., books	4 80	
Prof. T. L. Walker, disbursements:		
Laboratory supplies, $28.18; rubber tubing and hardware, $16.55; sundries, $9.18	53 91	
University Press, printing and stationery	47 05	
Freight charges	14 10	
Superintendent's Dept., labour, $11.87; material, $24.93	36 80	
	$477 34	
Less received from students for breakages, etc. $53 72		
Sale of minerals 1 50		
	55 22	
		$422 12

37. *Psychological Department.*

Maintenance (765.36):		
Bureau of Publications, Teachers' College Journal	$38 83	
Canadian General Electric Co., binding posts	3 17	
T. Eaton Co., tables	27 20	
Gaylord Bros., binders	8 72	
Hardware Co. of Toronto, hardware	108 99	
John Laballister, cleaning	40 00	
T. R. Lockhart, lantern plates, lamp, etc.	36 80	
Office Specialty Mfg. Co., chair and desk	29 50	
E. J. Pratt, disbursements:		
Laboratory supplies, $43.18; typewriter ribbons and supplies, $15.65; postage and sundries, $10.26	69 09	
Students' Book Dept., loose leaf covers	36 00	
Tablet & Ticket Co., envelopes, etc.	3 77	
L. L. Thurston, lists	4 73	
University Press, printing and stationery	59 50	
Warwick & York Inc., books	8 60	
A. R. Williams Machinery Co., saw blade	2 39	
H. A. Wilson Co., dice	1 24	
Zone Supply Officer, Washington, examination blanks, etc.	5 95	
Freight charges	3 01	
Superintendent's Dept., labour, $148.01; material, $129.86	277 87	
		$765 36

38. *Mathematical Department.*

University Press, printing	$19 25	
		$19 25

39. *Sub-Department of Mechanics.*

Maintenance ($164.17):		
Geo. C. Cooper, taps, etc.	$28 51	
T. Eaton Co., watch	12 00	
Hardware Co. of Toronto, hardware	31 24	
C. S. L. Hertzberg, drawings	33 50	
N. E. Sheppard, copying Mss.	20 00	
F. E. Watson, drafting	18 00	
University Press, stationery and printing	4 35	
Superintendent's Dept., labour, $8.40; material, $8.17	16 57	
		$164 17

40. *Political Science Building and Department.*

(*a*) Maintenance of Building:		
Fuel ($449.79):		
Britnell & Co.	$22 90	
Connell Anthracite Mining Co.	219 37	
W. H. Cox Coal Co.	168 77	
Dunlop Coal Co.	38 75	
Gas and city current ($10.23):		
Consumers' Gas Co.	9 50	
Toronto Electric Light Co.	73	
Water ($18.92):		
City Treasurer	18 92	
Caretaker's supplies ($59.75):		
Superintendent's Dept., material	59 75	
Cleaning ($201.07):		
Superintendent's Dept., labour	201 07	
Repairs and renewals ($393.01):		
Art Metropole, supplies	5 00	
A. Matthews, Ltd., repairing roof	26 22	
G. R. Workman, draughting plans	15 00	
Superintendent's Dept., labour, $75.78; material, $271.01	346 79	
	$1,132 77	
Less sundry credits (cleaning)	47 00	
		$1,085 77
(*b*) Maintenance of Department:		
Office and class-room supplies ($431.95):		
The Bursar, postage supplied	12 45	
T. Eaton Co., mats	2 90	
G. E. Jackson, reimbursement for account of Superintendent of Documents, Washington	25 55	
J. Mavor, petty disbursements	4 70	
Miss C. Tocque, typing	1 00	
United Typewriter Co., typewriter, etc.	113 85	
University Press, printing and stationery	115 70	
Superintendent's Dept., labour, $117.76; material, $38.04	155 80	
Clerical assistance ($331.40):		
Miss Dorothy Anglin, 247¼ hours at 50c.	123 78	
Miss H. MacDonell, 414½ hours at 50c.	207 62	
	$763 35	
Less sundry credits	3 90	
		$759 45
		$1,845 22

41. *History.*

Class-room supplies ($55.82):		
The Bursar, postage supplied	$3 00	
Prof. G. M. Wrong, disbursements	6 42	
University Press, printing and stationery	46 40	
		$55 82

42. *Italian and Spanish Departments.*

Class-room supplies ($25.10):		
Students' Book Dept., book	$12 20	
University Press, stationery	12 90	
		$25 10

43. *University College Departments.*

Greek:		
(Nothing spent.)		
Latin ($14.65):		
University Press, printing and stationery	$14 65	
Ancient History ($31.55):		
University Press, printing and stationery	31 55	
English:		
(Nothing spent.)		
French ($79.05):		
The Bursar, postage supplied	2 90	
Students' Book Dept., books	50 55	
University Press, printing and stationery	25 60	
German:		
(Nothing spent.)		
Orientals ($49.15):		
Prof. G. W. Jordan, books	13 00	
Students' Book Dept., books	10 75	
Upper Canada Tract Society, class-room supplies	22 20	
University Press, printing and stationery	3 20	
Ethics ($21.00):		
Office Specialty Mfg. Co., cabinet	12 65	
University Press, printing and stationery	8 35	
		$195 40

44. *University College, General Expenses.*

Stationery and printing ($119.95):		
The Bursar, postage supplied	$20 00	
United Typewriter Co., repairs and ribbon	2 90	
University Press, printing and stationery	97 05	
Advertising ($4.80):		
Evening Telegram	2 28	
Toronto Daily Star	1 26	
Toronto Times	1 26	
Incidentals ($6.00):		
Toronto Weekly Railway and Steamboat Guide Co., subscription	6 00	
Clerical assistance ($23.05):		
Miss Agnes MacGillivray, 30¾ hours at 75c. per hour	23 05	
		$153 80

45. *Trinity College Service.*

The Bursar, Trinity College, students' car fares for transportation to University lectures	$853 84
	$455,075 98

III. Faculty of Medicine.

46. *Salaries.*

Dr. C. K. Clarke, Dean of the Faculty, 12 mos. to 30 June (resigned—paid also $500 as Professor)	$2,000 00	
		$2,000 00

46. *Salaries.*—Continued.

Anatomy.

J. P. McMurrich, Professor, 12 mos. to 30 June (paid also $300 for Special Lectures)	$5,000 00	
J. C. Watt, Assistant Professor, 12 mos. to 30 June (paid also $75 for Special Courses for Returned Men)	2,800 00	
T. A. Robinson, Demonstrator in charge of Dental Students (Sessional), $750; arrears for 1918-19, $750	1,500 00	
Assistants (Sessional):		
R. E. Gaby (paid also in Surgery)	150 00	
Wallace A. Scott (paid also in Surgery)	150 00	
W. E. Brown	100 00	
G. M. Dale (also in Surgery)	100 00	
R. O. Fisher	100 00	
R. I. Harris (also in Surgery)	100 00	
R. J. P. McCulloch	100 00	
H. L. Rowntree	100 00	
J. S. Simpson (also in Surgery)	100 00	
F. W. Weston	100 00	
A. S. Lawson (also in Surgery)	50 00	
H. B. Van Wyck	50 00	
Assistants (Sessional—without salary):		
F. G. Banting	.....	
L. G. Brayley	.....	
G. W. Carleton	.....	
H. A. Gates	.....	
R. P. Cromarty (also in Surgery)	.....	
K. G. McKenzie	.....	
E. E. Shouldice	.....	
Miss G. Dowsley, Technical Assistant, 12 mos. to 30 June	550 00	
G. Lynne, Laboratory Assistant and Caretaker, 12 mos. to 30 June	1,100 00	
Robt. Eades, Laboratory Attendant, 12 mos. to 30 June (paid also $486.63 as Cleaner, Biological Building)	400 00	
		$12,550 00

Pathology and Bacteriology.

J. J. Mackenzie, Professor, 12 mos. to 30 June (paid also $50 for Special Courses)	$5,000 00	
Lecturers (Sessional):		
H. K. Detweiler, July and August (paid also in Medicine)	316 66	
H. B. Maitland	1,500 00	
Miss M. L. Cowan, Fellow (Sessional)	600 00	
Demonstrators (Sessional):		
W. L. Robinson, also Assistant Curator of Pathological Museum	150 00	
G. W. Lougheed, Clinical Microscopy	250 00	
Assistants (Sessional):		
H. W. Baker (paid also in Surgery)	100 00	
R. R. Graham (paid also in Surgery)	100 00	
Miss M. L. Wessels (paid also as Laboratory Assistant from Special Fund)	100 00	
I. H. Erb	50 00	
A. B. Le Mesurier (also in Surgery)	50 00	
Ambrose Moffat	50 00	
Laboratory Assistants, each 12 mos. to 30 June:		
A. Wilson (paid also $550 as Caretaker of Pathological Building)	500 00	
F. Thibault, 6 mos. at $850 per annum, $425; 6 mos. at $1,000 per annum, $500	925 00	
Laboratory attendants for preparing media:		
A. Myers, 3 mos. at $32 per month, $96; 9 mos. at $37, $334	430 00	
Miss E. A. Gordon, 3 mos. at $50 per month, $150; 9 mos. at $55.55, $500	650 00	
Miss I. E. Ruttan, stenographer, 12 mos. to 30 June	950 00	
		$11,721 66

46. *Salaries.*—Continued.

Chemical Pathology.

C. G. Imrie, Lecturer (Sessional)	$2,350 00	
F. W. Rolph, Demonstrator and Assistant in Clinical Laboratory (Sessional)	750 00	
D. H. Boddington, Assistant in Clinical Laboratory (Sessional)	250 00	
Dr. Gladys L. Boyd, Demonstrator (Sessional)	500 00	
S. G. Graham, Fellow (Sessional)	500 00	
T. Richardson, Laboratory Assistant, 12 mos. to 30 June	850 00	
Mrs. Margaret Davis, Laboratory Attendant, 12 mos. to 30 June	300 00	
		$5,500 00

Pharmacy and Pharmacology.

V. E. Henderson, Professor, 12 mos. to 30 June	$4,000 00	
A. Brodey, Demonstrator (Sessional)	1,000 00	
Assistants (Sessional):		
J. A. MacDonald	250 00	
G. M. Dobbin	150 00	
John Archibald	75 00	
Miss Dorothy Birkett	75 00	
P. D. Spohn (paid also in Biology)	75 00	
Allan Brock, Laboratory Attendant, 3 mos. at $65 per month, $195; 9 mos. at $75, $675	870 00	
		$6,495 00

Medicine and Clinical Medicine.

Duncan Graham, Professor, 12 mos. to 30 June	$10,000 00	
Associate Professors, each 12 mos. to 30 June:		
J. T. Fotheringham	700 00	
W. B. Thistle	600 00	
G. Chambers	450 00	
H. B. Anderson (without salary)	.....	
W. Goldie (without salary)	.....	
Clinicians (Sessional):		
H. K. Detweiler (paid also in Pathology)	2,250 00	
W. R. Campbell	1,800 00	
N. M. Keith	1,125 00	
Ross Jamieson (6 months)	750 00	
A. A. Fletcher (4 months)	500 00	
Clinicians (Sessional—without salary):		
R. G. Armour	.....	
G. F. Boyer	.....	
A. W. Canfield	.....	
A. H. W. Caulfield (paid in Connaught Antitoxin Laboratory)	.....	
F. A. Clarkson	.....	
J. H. Elliott	.....	
A. M. Goulding	.....	
N. Gwyn	.....	
B. Hannah	.....	
G. W. Howland	.....	
H. S. Hutchison	.....	
J. D. Loudon	.....	
D. McGillivray	.....	
A. J. Mackenzie	.....	
A. G. McPhedran (paid in Biology)	.....	
J. H. McPhedran	.....	
W. Fletcher McPhedran	.....	
F. S. Minns	.....	
E. A. Morgan	.....	
L. Murray	.....	
W. Ogden	.....	
J. A. Oille	.....	
T. J. Page	.....	
H. C. Parsons	.....	
J. G. Phillips	.....	
George Pirie	.....	

46. *Salaries.*—Continued.

F. W. Rolph (paid in Pathology)	.....	
Chas. Sheard, Jr.	.....	
D. King Smith	.....	
G. E. Smith	.....	
H. Spohn	.....	
G. S. Strathy	.....	
E. J. Trow	.....	
M. B. Whyte	.....	
G. S. Young	.....	
H. M. Tovell, arrears as Assistant for 1918-19	$50 00	
Leonard Heddick, Technician, 6 October to 30 June at $100 per month, of which half charged to Special Research	441 66	
Miss Dorothy Murray, Stenographer, 1 September to 30 June at $900 per annum	750 00	
Sub-Department of Pædiatrics:		
Alan Brown, Associate Professor in Pædiatrics (without charge)	.....	
Chemists (Annual):		
Miss A. Courtney, 6 mos. from 1 January at $2,500 per annum	1,250 00	
Miss Ida F. MacLachlan, Assistant, 6 mos. from 1 January at $1,500 per annum	750 00	
		$21,416 66

Surgery and Clinical Surgery.

Professors, each 12 mos. to 30 June:		
I. H. Cameron	1,050 00	
A. Primrose	700 00	
Associate Professors, each 12 mos. to 30 June:		
G. A. Bingham	700 00	
H. A. Bruce	700 00	
F. N. G. Starr	700 00	
C. L. Starr (Orthopaedics)	450 00	
W. McKeown	450 00	
S. McHay	350 00	
Associates, each 12 mos. to 30 June:		
C. B. Shuttleworth	300 00	
J. F. Uren	300 00	
G. Silverthorn	300 00	
E. S. Ryerson (paid also $1,250 as Secretary to Faculty)	300 00	
Wallace A. Scott (paid also in Anatomy)	300 00	
W. W. Jones	300 00	
W. E. Gallie	300 00	
Demonstrators (Sessional):		
M. H. V. Cameron	250 00	
R. E. Gaby (paid also in Anatomy)	250 00	
J. A. Roberts	250 00	
N. S. Shenstone	250 00	
G. E. Wilson (paid also $50 for Special Courses)	250 00	
A. B. Wright	250 00	
F. A. Cleland	200 00	
O. R. Mabee	200 00	
J. A. McCollum	200 00	
A. S. Moorhead	200 00	
A. H. Perfect	200 00	
D. E. Robertson	200 00	
Assistants (Sessional):		
H. W. Baker (paid also in Pathology)	100 00	
R. R. Graham (paid also in Pathology)	100 00	
C. H. Hair	100 00	
P. K. Menzies	100 00	
B. Z. Milner	100 00	
C. B. Parker	100 00	
Robin Pearse	100 00	
L. B. Robertson	100 00	
H. E. Clutterbuck	50 00	
Temporary Assistants (Sessional—without salary):		
E. C. Beer	.....	
W. A. Costain	.....	

46. *Salaries.*—Continued.

R. P. Cromarty (also in Anatomy)	.....	
P. M. Dale (also in Anatomy)	.....	
T. A. J. Duff	.....	
C. H. Gilmour	.....	
R. I. Harris (paid in Anatomy)	.....	
H. Harrison	.....	
A. S. Lawson (paid in Anatomy)	.....	
A. B. Le Mesurier (paid in Pathology)	.....	
G. C. McIntyre	.....	
T. A. Robinson (paid in Anatomy)	.....	
J. S. Simpson (paid in Anatomy)	.....	
F. E. Watts	.....	
J. E. Woods	.....	
		$10,750 00

Obstetrics and Gynæcology.

B. P. Watson, Professor, 12 mos. to 30 June	$1,000 00	
Associate Professors, each 12 mos. to 30 June:		
K. C. McIlwraith, Obstetrics	450 00	
F. W. Marlow, Gynæcology	350 00	
W. B. Hendry	350 00	
J. A. Kinnear, Associate, 12 mos. to 30 June	300 00	
Assistants (Sessional):		
J. Gordon Gallie (paid also $50 for Special Courses)	150 00	
W. W. Lailey	100 00	
Wm. A. Scott	100 00	
N. D. Frawley, Obstetrics	100 00	
R. W. Wesley, Gynæcology	100 00	
Miss Muriel Bonham, Laboratory Assistant, 12 months' salary	600 00	
		$3,600 00

Ophthalmology.

Professors, each 12 mos. to 30 June:		
J. M. MacCallum	$700 00	
G. H. Burnham (resigned)	450 00	
Assistants (Sessional):		
C. Campbell	150 00	
W. H. Lowry	150 00	
D. N. Maclennan	150 00	
		$1,600 00

Oto-Laryngology.

D. J. G. Wishart, Professor, 12 mos. to 30 June	$700 00	
Associate Professors (without salary):		
G. Royce	.....	
Perry Goldsmith	.....	
Pathologists (Sessional):		
F. J. O'Connor (up to 1 March)	$400 00	
J. M. Dickie (15 March to 30 June)	350 00	
Assistants (Sessional—without salary):		
G. M. Biggs	.....	
Edmund Boyd	.....	
C. A. Campbell	.....	
W. G. McKechnie	.....	
Dr. Jean Sproule-Manson	.....	
Chas. Clark	.....	
J. C. Calhoun	.....	
A. A. Halliday	.....	
		$1,450 00

Therapeutics.

R. D. Rudolf, Professor, 12 mos. to 30 June	$1,000 00	
Demonstrators (Sessional):		
C. E. C. Cole	200 00	
G. W. Ross (without salary)	.....	
W. V. Watson, Assistant (Sessional)	100 00	
S. Johnston, Demonstrator, Anæsthesia (Sessional)	250 00	

46. *Salaries.*—Continued.

Assistants, Anæsthesia (Sessional):		
T. R. Hanley	$100 00	
W. H. Carveth	50 00	
J. J. Hurley	50 00	
M. D. McKichan	50 00	
C. H. Robson	50 00	
Ernest Henderson (arrears for 1918-19)	50 00	
		$1,900 00
Hygiene.		
J. A. Amyot, Professor, at $2,500, 6 mos. to 31 December (resigned)	$1,250 00	
J. G. Fitzgerald, Professor, 6 mos. at $1,000, $500; 6 mos. at $2,500, $1,250 (paid also $3,250 as Director of Connaught Antitoxin Laboratory)	1,750 00	
Lecturers (Sessional):		
R. D. Defries (paid also $3,000 in Connaught Antitoxin Laboratory)	500 00	
J. G. Cunningham, Industrial Hygiene	1,000 00	
H. M. Lancaster, Demonstrator, Sanitary Chemistry (Sessional)	250 00	
Technical Assistants (part time—paid also in Connaught Antitoxin Laboratory):		
Miss H. Finegan	100 00	
Wm. Knowles (resigned 31 December)	100 00	
Miss L. Hanna (1 January to 30 June)	100 00	
		$5,050 00
Psychiatry.		
C. K. Clarke, Professor, 12 mos. to 30 June (paid also as Dean of Faculty)	$500 00	
J. M. Forster, Associate, 12 mos. to 30 June	50 00	
E. J. Pratt, Assistant (Sessional—paid also in Psychology)	50 00	
		$600 00
Miscellaneous.		
N. A. Powell, Professor of Medical Jurisprudence, etc., 12 mos. to 30 June (resigned)	$700 00	
N. H. Beemer, Professor (extra-mural) of Mental Diseases (without salary)	.....	
		$700 00
Special Lectures.		
Course in English and Philosophy for First Year Classes:		
J. J. R. Macleod, Class Adviser (Sessional—paid also in Physiology)	$500 00	
A. G. Huntsman, Supervision of Course (also in Biology)	250 00	
Instructors (Sessional)		
G. S. Brett (paid also in Philosophy)	100 00	
J. P. McMurrich (paid also in Anatomy)	100 00	
H. Wasteneys (paid also in Bio-Chemistry)	100 00	
W. G. Frisby, Tutor in English (Sessional)	1,000 00	
H. E. Pearen, Assistant in English (Sessional)	312 00	
J. P. McMurrich, Lectures on History of Medicine (paid also in Anatomy)	200 00	
		$2,562 00
Secretary's Office.		
E. S. Ryerson, Secretary to Faculty, 12 mos. to 30 June (paid also in Surgery)	$1,250 00	
Miss Wilma Jones, Assistant, 12 mos. to 30 June	1,000 00	

46. *Salaries.*—Continued.

Stenographers, each 12 mos. to 30 June:		
Miss Olive Russell	$1,050 00	
Miss Ada P. Perry	800 00	
		$4,100 00
		$91,995 32
Carried to No. 52, Department of Medicine		21,316 66
		$70,678 66

48. *Anatomical Department.*

Anatomical Material ($1,394.46):		
C. N. Greenwood	$22 85	
D. J. Harris	16 00	
H. H. Marter	16 00	
F. W. Matthews	504 91	
A. M. Mitchell	16 00	
M. Morse & Sons	32 00	
J. Minshull	50 00	
H. R. Ranks	528 00	
N. J. Roadhouse	50 20	
Wm. Speers	64 00	
Superintendent's Dept., labour, $31.38; material, $63.12	94 50	
Material for preservation, chemicals, etc. ($307.85):		
W. R. Brock Co., cotton, etc.	20 74	
H. S. Eckels & Co., syringe	5 26	
Ingram & Bell, chemicals	165 39	
Lyman Bros. & Co., sponge	2 83	
University Press, paper	75	
Victoria Paper & Twine Co., paper	9 00	
Freight charges	91 98	
Superintendent's Dept., labour, .19; material, $11.71	11 90	
Incidentals ($695.61):		
Adams Furniture Co., stools	130 00	
Allen Mfg. Co., laundry	15 19	
T. Eaton Co., boiler, etc.	16 10	
J. F. Hartz Co., skull	54 00	
Hudson-Parker, Ltd., coats and aprons	73 75	
Ingram & Bell, Ltd., skulls, etc.	147 37	
Professor J. P. McMurrich, disbursements	5 21	
Photography Dept., slides	4 00	
Robt. Simpson Co., tin cups	4 32	
United Typewriter Co., inspections	5 25	
University Press, printing and stationery	77 49	
J. C. Watt, skull	10 00	
Petty items (2)	3 44	
Freight charges	8 55	
Superintendent's Dept., labour, $38.36; material, $102.58	140 94	
	$2,397 92	
Less sundry credits—sale of barrels, etc	19 76	
		$2,378 16

49. *Pathology and Bacteriology.*

Chemicals and supplies ($1,708.85):	
J. Allen, meat	$62 14
Allen Mfg. Co., laundry	15 85
Bio-Chemistry Dept., pans	24 70
Wm. Bowskill, rabbits	4 00
R. Brown, rabbits	10 65
Brown Bros., stationery	26 10
The Bursar, postage supplied	18 00
Canadian Carbonate Co., oxygen	36 13

49. *Pathology and Bacteriology.*—Continued.

Charles Dunnett, animals		$9 25	
T. Eaton Co., towels		44 88	
H. M. Evans, guinea pigs		5 10	
C. T. Harrison, guinea pigs		9 00	
J. F. Hartz Co., cylinders, alcohol, etc.		132 91	
Ingram & Bell, chemicals, etc.		293 99	
D. E. Jones, rabbits		46 50	
Consolidated Plate Glass Co., glass		36 00	
Prof. J. J. MacKenzie, disbursements: Animals, $17.20; food for animals, $3.25; laboratory supplies, $6.10; sundries, $3.45		30 00	
Dr. H. B. Maitland, rabbits		14 00	
J. McGillian, carrots		211 50	
Moore & Mackie, guinea pigs		8 40	
Thomas Muir, rabbits		11 25	
New York Department of Health, serum		7 03	
Standard Chemical, Iron & Lumber Co., aceton		10 40	
Edward Souter, mice		7 50	
A. H. Thomas Co., cylinders, etc.		28 42	
Toronto Produce Co., fodder		172 84	
United Typewriter Co., inspections		7 50	
University Press, printing and stationery		136 10	
Wm. West, animals		24 00	
Petty items (5)		10 09	
Freight charges		149 69	
Superintendent's Department, labour, $56.43; material, $48.50		104 93	
Apparatus ($468.58):			
Bausch & Lomb Optical Co., condenser		14 74	
J. F. Hartz Co., burners, tubes, etc.		17 72	
Ingram & Bell, surgical instruments, etc.		341 78	
Jones Bros. & Co., clippers		5 13	
Geo. A. Matthews, rewinding armature		16 35	
A. Richards, trays		4 25	
Richards Bros., boxes		27 00	
Geo. Sparrow & Co., pots		5 00	
W. Lloyd Wood, hydrogen, etc.		4 95	
Superintendent's Dept., labour, $7.41; material, $24.25		31 66	
Care of Refrigerating Plant ($338.27):			
Canadian Ice Machine Co., repairs		40 90	
Superintendent's Dept., labour, $257.90; material, $39.47.		297 37	
		$2,515 70	
Less Sundry Credits:			
Pump and Motor	$50 00		
Sale of Material	30 13		
		80 13	
			$2,435 57

50. *Chemical Pathology.*

Supplies ($800.71):		
Allen Manufacturing Co., laundry	$17 87	
Brown Bros., ink	3 75	
Eastman Kodak Co., alcohol	5 12	
Grasselli Chemical Co., chemicals	65 40	
Ingram & Bell, corks, etc.	11 06	
Lyman Bros., & Co., drugs	72 88	
Geo. A. Matthews, commutator	15 35	
J. McGillian, guinea pigs	9 90	
McKay School Equipment Co., bottles, etc.	33 56	
J. O'Donnell, animals	72 75	
A. H. Thomas & Co., supplies	340 33	
Toronto Dog and Cat Hospital, dogs	6 00	
Petty items (3)	4 66	
University Press, printing and stationery	26 65	
Superintendent's Dept., labour, $24.73; material, $90.70	115 43	

50. *Chemical Pathology.*—Continued.

Apparatus ($628.95):		
A. H. Baird, flasks, etc.	$334 82	
Ingram & Bell, apparatus	55 00	
International Equipment Co., nephelometer	8 45	
Richards Glass Co., bottles	2 40	
C. M. Sorenson Co., calorimeters, etc.	84 07	
A. H. Thomas Co., tubes, etc.	101 66	
Freight Charges	22 25	
Superintendent's Dept., labour, $12.73; material, $7.57	20 30	
		$1,429 66

51. *Pharmacy and Pharmacology.*

Supplies and Apparatus ($874.43):		
Anglers Co., frogs	$13 36	
Canadian General Electric Co., motor	31 50	
Connaught Antitoxin Laboratories, Antitoxin Division, animals, antitoxin	42 50	
Dental Co. of Canada, oxygen	18 20	
J. A. Fontaine, frogs	40 00	
Harvard Apparatus Co., electrodes	35 05	
Professor V. E. Henderson, disbursements: Laboratory supplies, $24.69; hardware, $14.63; sundries, $8.45	47 77	
Geo. M. Hendry Co., blackboard	9 80	
Ingram & Bell, forceps, scissors, etc.	30 22	
John McGillian, carrots, etc.	17 00	
McKay School Equipment, chemicals	27 46	
National Drug & Chemical Co., drugs	124 38	
Ontario Rubber Co., tubing, etc.	26 40	
Chas. Potter, oxygen	3 50	
Toronto Dog and Cat Hospital, animals	99 75	
Toronto Produce Co., fodder	55 32	
Western Electrical Instrument Co., ammeter	79 53	
Will Corporation, morphine	4 90	
University Press, printing and stationery	47 05	
Petty items (3)	6 25	
Freight Charges	8 27	
Superintendent's Dept., labour, $50.05; material, $56.17	106 22	
		$874 43

52. *Medicine.*

Supplies and Apparatus ($7,384.00):		
Arlington Chemical Co., chemicals	$35 07	
Brown Bros., stencil, etc.	9 75	
The Bursar, postage supplied	15 50	
Connaught Antitoxin Laboratories, Antitoxin Division, guinea pigs	186 40	
Mrs. M. Davis, cleaner, Nov. 3rd to June 26th, at $1.56 per week	53 04	
Dr. Duncan Graham, disbursements: Stationery, $8.55; sundries, $9.28	17 83	
Ingram & Bell, surgical instruments, etc.	5,614 99	
Chas. W. Mack, rubber stamp	2 70	
Oliver, Master, animals	3 60	
Office Specialty Mfg. Co., card sections	186 80	
E. S. Souter, mice	12 50	
Students' Book Department, books	695 40	
Synthetic Drug Co., mice	23 50	
H. B. Tapscott, guinea pigs	4 00	
A. H. Thomas Co., glasses	12 11	
United Typewriter Co., typewriter	131 62	
University Press, printing and stationery	351 05	
Superintendent's Dept., labour, $17.65; material, $10.49	28 14	

52. *Medicine.*—Continued.

Sub-Department of Pædiatrics:		
Apparatus and Supplies ($2,159.39):		
The Art Metropole, slides, rule, etc.	$25 50	
The Bursar, postage supplied	1 50	
Canadian Laboratory Supplies, drugs, etc.	269 14	
The T. Eaton Co., hardware	13 95	
Dr. Duncan Graham, petty disbursements	10 00	
J. F. Hartz Co., flasks, tubes, etc.	647 55	
Geo. M. Hendry Co., chemicals	135 95	
Ingram & Bell, surgical instruments, etc.	794 18	
Lyman Bros. & Co., drugs	50 10	
Office Specialty Mfg. Co., desk, chairs, etc.	126 45	
Richards Glass Co., tubes	38 98	
Wheeler & Bain, copper bath	31 00	
University Press, stationery	11 45	
Superintendent's Dept., material	3 64	
	$9,543 39	
Salaries as detailed under No. 46, $21,416.66, transferred owing to error in posting (corrected in 1920-21) as..	21,316 66	
	$30,860 05	
Charged to Eaton Endowment, Schedule 4(*a*)	17,860 05	
		$13,000 00

53. *Maintenance of Building.*

(1 Queen's Park)

Fuel ($594.07):		
Connell Anthracite Mining Co.	$454 57	
Dunlop Coal Co.	139 50	
Gas and City Current ($106.34):		
Consumers' Gas Co.	75 88	
Toronto Hydro-Electric System	30 46	
Water ($35.66):		
City Treasurer	35 66	
Cleaning ($204.60):		
Superintendent's Department, labour	204 60	
Repairs and Renewals ($113.88):		
Superintendent's Dept., labour, $61.25; material, $52.63..	113 88	
Caretaker's Supplies ($30.01):		
Superintendent's Dept., labour, 68c; material, $29.33....	30 01	
		$1,084 56

54. *Surgery.*

Supplies and Laboratory Expenses ($39.25):		
J. F. Hartz Co., skull	$15 30	
University Press, printing	23 95	
Apparatus ($263.66):		
Geo. M. Hendry Co., blackboard	29 40	
Superintendent's Dept., labour, $77.98; material, $156.28.	234 26	
		$302 91

55. *Obstetrics and Gynæcology.*

Supplies and Apparatus ($109.67):		
J. F. Hartz Co., knife, etc.	$11 20	
Ingram & Bell, paraffin	6 20	
University Press, stationery	9 25	
Superintendent's Dept., labour, $57.25; material, $25.77..	83 02	
		$109 67

56. *Ophthalmology.*

(Nothing spent.)

57. *Oto-Laryngology.*

Supplies and Apparatus ($258.84):		
Miss P. Armour, charts	$50 00	
Ingram & Bell, instruments	202 49	
University Press, printing	6 35	
		$258 84

58. *Therapeutics.*

Supplies and Apparatus ($100.49):		
J. F. Hartz Co., surgical instruments	$31 25	
Chas. Potter, oxygen	3 75	
Students' Book Dept., book	3 75	
Geo. Tremaine & Co., oxygen, etc.	13 42	
Toronto General Hospital, cards	12 00	
W. Lloyd Wood, bottles	5 32	
University Press, printing	31 00	
		$100 49

59. *Hygiene.*

Supplies and Apparatus ($1,503.09):		
T. Eaton Co., towels, etc.	$22 50	
Gurney Foundry Co., plates	7 20	
J. F. Hartz Co., surgical instruments	615 47	
Ingram & Bell, chemicals	163 22	
Taylor Instrument Co., thermometers	15 18	
A. H. Thomas Co., supplies	171 05	
Miss Wicksey, cleaning	4 50	
Wrought Iron Range Co., boiler	67 50	
Superintendent's Dept., labour, $263.57; material, $172.90..	436 47	
Alterations ($800.00):		
Connaught Antitoxin Laboratories, Research Division, share of alterations	800 00	
		$2,303 09

60. *Medical Jurisprudence.*

(Nothing spent.)

61. *Medical Building.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($239.93):		
Consumers' Gas Co.	$239 93	
Water ($737.83):		
City Treasurer	737 83	
Caretaker's supplies ($247.22):		
Superintendent's Dept., labour, $5.32; material, $241.90....	247 22	
Cleaning ($1,443.74):		
Allen Manufacturing Co., laundry	3 58	
Canadian Cleaning Co., cleaning windows	50 00	
Superintendent's Dept., labour	1,390 16	
Repairs and renewals ($1,453.24):		
City Treasurer, elevator license	5 00	
W. Hood, exterminating rats	1 56	
A. Matthews, Ltd., roofing	205 02	
Oxyweld Co., repairs to smoke stack	27 20	
Routery Bros., lathing and plastering	24 20	
University Press, name plates	1 00	
Superintendent's Dept., labour $829.99; material, $359.27..	1,189 26	
Sundries:		
Remodelling heating system ($538.67):		
Superintendent's Dept., labour, $178.29; material, $360.38	538 67	
Seating Lecture Room ($239.40):		
McKay School Equipment Co., desks	239 40	

61. *Medical Building.*—Continued.

Incinerator ($300.00):		
North American Contracting & Manufacturing Co., incinerator	$300 00	
	$5,200 03	
Less sundry credits: Cleaning	55 83	
	$5,144 20	
Caretaker, Thos. Motton, 12 mos. to 30 June, $1,075.00; bonus for overtime work, $50.00	1,125 00	
Assistant to Caretaker, J. Cattle, 15 October to 30 June at $75 per month	637 50	
		$6,906 70

62. *Pathological Building.*

Heat and light ($4,555.57):		
Toronto General Hospital, in full for year 1919-20	$4,555 57	
Gas and city current ($818.01):		
Consumers' Gas Co.	818 01	
Water ($233.42):		
City Treasurer	233 42	
Caretaker's supplies ($176.07):		
Superintendent's Dept., labour, $6.85; material, $169.22	176 07	
Cleaning ($993.09);		
Allen Manufacturing Co., laundry	5 81	
Canadian Cleaning Co., cleaning windows	30 00	
Superintendent's Dept., labour	957 28	
Repairs and renewals ($746.61):		
City Treasurer, elevator license	10 00	
Geo. A. Matthews, commutator, etc.	85 45	
Patterson & Heward, sign	34 00	
Turnbull Elevator Mfg. Co., cables	74 00	
Superintendent's Dept., labour, $468.02; material, $75.14	543 16	
	$7,522 77	
Less sundry credits: Repairs	5 69	
	$7,517 08	
Caretaker, Alex. Wilson, 12 mos. to 30 June (paid also as laboratory attendant)	550 00	
		$8,067 08

63. *General Expenses.*

Stationery, printing, postage, office supplies, etc. ($2,177.58):		
Brown Bros., stationery	$1 40	
The Bursar, postage supplied	423 18	
Constable & Co., Ltd., medical register	2 73	
J. & A. Churchill, medical directory	5 89	
Lowe-Martin Co., cards	48 40	
McKay School Equipment, Ltd., blackboard	5 00	
Might Directories, directory	15 15	
Photography Dept., slides	13 00	
Dr. E. S. Ryerson, disbursements:		
Telegrams, $10.30; carfare, and sundries, $4.15	14 45	
Ryrie Bros., address	25 00	
Simmons & Son, wreath	15 00	
Standard Sanitary Mfg. Co., mirror	6 23	
Students' Book Dept., medical directory	8 00	
United Typewriter Co., inspections and key tops	22 50	
University Press, stationery and printing	1,564 20	
Superintendent's Dept., labour, $6.72; material, 73c.	7 45	
Furnishing room in Toronto General Hospital ($218.12):		
T. Eaton Co., mats, etc.	25 50	
Superintendent's Dept., labour, $70.43; material, $122.19	192 62	
Appropriation for Dean's Office ($310.53):		
Dr. C. K. Clarke, for disbursements by him	310 53	
		$2,706 23

64. *Summer Session in Medicine.*

Remuneration to Instructors ($1,490.00):		
R. C. Armour	$50 00	
M. H. V. Cameron	70 00	
F. A. Cleland	70 00	
H. E. Clutterbuck	70 00	
J. G. Gallie	70 00	
Wm. Goldie	70 00	
H. D. Harrison	70 00	
G. Howland	50 00	
H. S. Hutchison	70 00	
W. W. Lailey	70 00	
J. McCollum	70 00	
G. C. McIntyre	70 00	
W. C. MacKechnie	50 00	
D. N. Maclennan	50 00	
A. G. McPhedran	50 00	
F. McPhedran	70 00	
O. R. Mabee	70 00	
J. A. Oille	70 00	
C. B. Parker	70 00	
J. S. Simpson	70 00	
G. S. Strathy	70 00	
W. V. Watson	50 00	
G. S. Young	70 00	
		$1,490 00
		$114,126 05

IV. Faculty of Applied Science.

65. *Salaries.*

C. H. Mitchell, Dean of the Faculty, 12 mos. to 30 June	$5,000 00	
		$5,000 00

Electrical Engineering.

Professors, each 12 mos. to 30 June:		
T. R. Rosebrugh	4,750 00	
H. W. Price	4,000 00	
Lecturers (Sessional):		
W. S. Guest	2,250 00	
A. R. Zimmer	2,100 00	
Demonstrators (Sessional):		
Ross Taylor	1,000 00	
W. H. Orr	800 00	
W. G. Woonton (5 mos.)	650 00	
J. W. Lawson, Mechanician, 15 August to 30 June at $1,700 per annum, of which $700 charged to Special Research Fund	875 00	
Electricians:		
W. R. McKee, 12 mos. to 30 June	1,100 00	
Alfred Moss, 10½ mos. to 15 May (resigned), at $600 per annum	525 00	
		$18,050 00

Mechanical Engineering.

R. W. Angus, Professor, 12 mos. to 30 June	$4,350 00	
Assistant Professors:		
L. M. Arkley, 12 mos. to 30 June	2,850 00	
J. J. Traill, Hydraulics, 8 mos. to 29 February (resigned) at $2,500 per annum	1,666 66	

65. *Salaries.*—Continued.

Lecturers (Sessional):		
R. C. Mitchell, Hydraulics (February to April)	$435 00	
M. R. Riddell, Machine Design (November and December—resigned)	650 00	
G. H. Wilkes, Machine Design (January to April)	800 00	
J. H. Parkin, Thermodynamics	2,000 00	
Demonstrators (Sessional):		
N. G. McDonald	1,000 00	
O. W. Titus	1,000 00	
F. Hickey, Engineer and Machinist, 10 mos. salary	1,250 00	
Laboratory Firemen at 45c. to 50c. per hour:		
J. Power, 1,212¼ hours	551 36	
Peter Smith, 276 hours	138 00	
F. Heeney, 2 hours	90	
G. S. Laing, Laboratory Assistant, 12 mos. to 30 June	1,100 00	
		$17,791 92

Applied Mechanics.

J. McGowan, Professor, 12 mos. to 30 June	$4,250 00	
Associate Professors, each 12 mos. to 30 June:		
P. Gillespie	3,600 00	
C. R. Young	3,200 00	
A. T. Laing, Assistant Professor (part time—paid also as Secretary to Faculty)	1,000 00	
S. G. Bennett, Lecturer, Commercial Engineering (Sessional)	1,500 00	
W. L. Sagar, Fellow (Sessional)	600 00	
H. E. Davis, Demonstrator (4 mos. at $50)	200 00	
W. K. Simpson, Mechanician, 12 mos. to 30 June	1,600 00	
J. Brown, Laboratory Attendant, 9 mos. salary	600 00	
		$16,550 00

Mining Engineering.

H. E. T. Haultain, Professor, 12 mos. to 30 June	$4,750 00	
Lecturers (Sessional):		
F. C. Dyer	2,100 00	
J. T. King	2,000 00	
E. Tozer, Laboratory Assistant, 12 mos. to 30 June	1,000 00	
C. Waybrant, Laboratory Attendant, 7 mos. salary	550 00	
		$10,400 00

Metallurgical Engineering.

G. A. Guess, Professor, 12 mos. to 30 June	$4,750 00	
Wm. E Milligan, Lecturer (Sessional)	2,000 00	
Edward Higgins, Laboratory Attendant, 8 mos. salary	600 00	
		$7,350 00

Ferro-Metallurgy.

T. R. Loudon, Associate Professor, 12 mos. to 30 June	$3,100 00	
		$3,100 00

Surveying.

L. B. Stewart, Professor, 12 mos. to 30 June	$4,750 00	
W. M. Treadgold, Associate Professor, 12 mos. to 30 June	3,100 00	
S. R. Crerar, Assistant Professor, 12 mos. to 30 June	2,500 00	
Lecturers (Sessional):		
E. W. Banting	2,250 00	
J. W. Melson	1,500 00	
Demonstrators (Sessional):		
J. T. Ransom	1,200 00	
O. Rolfson at $1.100 (half time in Applied Chemistry)	550 00	
		$15,850 00

65. *Salaries.*—Continued.

Applied Chemistry.

J. Watson Bain, Professor of Chemical Engineering, 12 mos. to 30 June	$4,250 00	
Associate Professors, each 12 mos. to 30 June:		
M. C. Boswell, Organic Chemistry	3,250 00	
E. G. R. Ardagh, Analytical Chemistry	3,200 00	
H. J. Brownlee, Lecturer, Chemical Engineering (Sessional) at $1,400, November and December (transferred to Special Research)	400 00	
Demonstrators (Sessional):		
A. R. Duff, at $1,200 (resigned 17 January)	512 50	
O. Rolfson, at $1,100 (half time in Surveying)	550 00	
S. J. Krug	1,000 00	
G. G. Macdonald	1,000 00	
Glass-blowers:		
R. A. Johnson, 9 December to 15 June at $150 per month	935 00	
G. E. Leworthy, 1 mo. (paid also in Physics)	80 00	
D. Sinclair, Laboratory Assistant, 12 mos. to 30 June	1,250 00	
Laboratory Attendants:		
J. Johnson, 11½ mos. salary at $600 per annum	575 00	
Geo. Martin, 27 October to 31 January at $35 a month, $110.65; 1 February to 27 March at $40 a month, $75.81	186 46	
		$17,188 96

Electro-Chemistry.

W. R. Fetzer, Demonstrator (Sessional)	$1,000 00	
E. A. Bishop, Lecture Assistant (Sessional, paid also as Caretaker, Mining Bldg.)	100 00	
Max Martin, Laboratory Attendant, 9 October to 15 June at $35 per month	270 67	
		$1,370 67

Architecture.

C. H. C. Wright, Professor, 12 mos. to 30 June	$4,750 00	
A. W. McConnell, Associate Professor, 12 mos. to 30 June	3,100 00	
H. H. Madill, Lecturer (Sessional)	1,850 00	
Special Lecturers (Sessional):		
John M. Lyle	500 00	
W. A. Langton	250 00	
H. E. Moore	100 00	
Wm. Rae	100 00	
R. K. Shepard	100 00	
A. Frank Wickson	100 00	
J. L. Banks, Instructor, Modelling (Sessional, part time)	800 00	
F. E. Simpson, Assistant, Modelling (Sessional)	500 00	
C. W. Jeffreys, Instructor, Freehand Drawing (Sessional, part time)	800 00	
Miss J. C. Laing, Instructor and Librarian, 12 mos. to 30 June	1,100 00	
F. Baker, Attendant, Night Classes, 64 evenings at $1.50	96 00	
		$14,146 00

Drawing.

C. H. C. Wright, Professor (paid as Professor of Architecture)	.....	
J. R. Cockburn, Associate Professor, Descriptive Geometry, 12 mos. to 30 June	3,250 00	
Lecturers (Sessional):		
W. J. Smither	2,100 00	
W. J. T. Wright	1,800 00	
Demonstrators (Sessional):		
B. W. Bemrose	1,000 00	
W. B. Dunbar	1,000 00	
H. J. Franklin	1,000 00	
E. R. Grange	1,000 00	
W. K. Greatrex	1,000 00	

65. *Salaries.*—Continued.

D. F. McGugan	$1,000 00	
H. C. Rose	1,000 00	
A. C. Wilson	1,000 00	
G. R. Workman	1,000 00	
F. J. Mulqueen	875 00	
George Brown, Attendant in Drafting Rooms, 8 mos. salary..	600 00	
Mrs. M. Mackey, Office Assistant, 10 weeks at $18	180 00	
		$17,805 00

Engineering Physics and Photography.

G. R. Anderson, Associate Professor, 12 mos. to 30 June	$3,600 00	
G. L. Wallace, Demonstrator (Sessional)	1,200 00	
K. B. Jackson, Instructor (Sessional)	1,000 00	
Photographers:		
A. J. Burge, 9 mos. salary	750 00	
H. R. Jarvis, Assistant, 34 weeks at $6 to $15 per week	348 00	
		$6,898 00

Special Lectures.

W. S. Ferguson, Lectures in Accounting	$600 00	
A. R. Clute, Lectures on Company Law (paid also in Political Science)	300 00	
		$900 00

Secretary's Office.

A. T. Laing, Secretary to Faculty and Librarian, 12 mos. to 30 June (paid also in Applied Mechanics)	$2,500 00	
Miss F. McMechan, Assistant to Secretary, 12 mos. to 30 June (resigned)	1,100 00	
Stenographers:		
Miss R. Cave, 12 mos. to 30 June	950 00	
Miss E. Myers, 20 September to 30 June at $900 per annum	700 00	
		$5,250 00
		$157,650 55

66. *Mining Building.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($1,685.16):		
Consumers' Gas Co.	$1,685 16	
Water ($197.75):		
City Treasurer	197 75	
Caretaker's Supplies ($289.35):		
Superintendent's Dept., labour, $4.83; material, $284.52	289 35	
Cleaning ($2,181.64):		
Allen Mfg. Co., laundry	5 80	
Canadian Cleaning Co., cleaning windows	50 00	
Superintendent's Dept., labour	2,125 84	
Repairs and renewals ($1,599.08):		
Wm. Bartlett & Son, shades	124 69	
City Treasurer, elevator license	10 00	
A. Matthews, Ltd., roofers, repairs	233 29	
University Press, name plates	1 15	
Superintendent's Dept., labour, $900.24; material, $329.71.	1,229 95	
	$5,952 98	
Less sundry credits: Cleaning	68 64	
	$5,884 34	
Caretaker, E. Bishop, 12 mos. to 30 June	1,200 00	
Messenger, Miss L. Hunter, 6 weeks, 10 days, at $6.50 per week	48 29	
		$7,132 63

67. *Engineering Building.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($76.97):		
Consumers' Gas Co.	$76 97	
Water ($223.50):		
City Treasurer	223 50	
Caretaker's supplies ($149.64):		
Superintendent's Dept., labour, $3.81; material, $145.83	149 64	
Cleaning ($1,899.89):		
Allen Mfg. Co., laundry	18	
Canadian Cleaning Co., cleaning windows	50 00	
Superintendent's Dept., labour	1,849 71	
Repairs and renewals ($1,697.75):		
Art Metropole, supplies	5 00	
Wm. Bartlett & Son, shades	147 30	
A. Matthews, Ltd., repairs	157 43	
Geo. A. Matthews, repairs to roof	28 60	
R. Robertson & Sons, digging drain	11 70	
Routery Bros., plastering	10 05	
University Press, name plate	1 00	
G. R. Workman, drafting plans	15 00	
Superintendent's Dept., labour, $1,002.81; material, $318.86	1,321 67	
Alterations in Attic ($293.20):		
Superintendent's Dept., labour, $195.08; material, $98.12	293 20	
	$4,340 95	
Less sundry credits: Cleaning, $9.69; repairs, $62.71	72 40	
	$4,268 55	
Caretakers ($750.00):		
W. J. Graham, 12 mos. to 30 June (reduced service)	$500 00	
S. J. Apted (supervision)	250 00	
		$5,018 55

68. *Old Y.M.C.A. Building.*

Gas, city current and occasional fuel ($279.45):		
Consumers' Gas Co., gas	$40 90	
Connell Anthracite Mining Co., fuel	207 55	
Dunlop Coal Co., fuel	31 00	
Cleaning ($54.33):		
Canadian Cleaning Co., cleaning windows	2 28	
Superintendent's Dept., labour	52 05	
Fireman, R. Brown, 5 mos. 25 days at $10.00 per month (part time)	58 33	
Alterations for extra drafting space ($99.61):		
Superintendent's Dept., labour, $50.82; material, $48.79	99 61	
		$491 72

69. *Thermodynamics Building.*

Heat and light (supplied from Central Power Plant):		
Fuel for Experimental Plant ($699.61):		
W. H. Cox Coal Co.	$658 92	
Britnell & Co.	40 69	
Gas and city current ($6.90):		
Consumers' Gas Co.	6 90	
Water ($146.25):		
City Treasurer	146 25	
Caretaker's supplies ($99.12):		
Superintendent's Dept., labour, $1.68; material, $97.44	99 12	
Cleaning ($343.55):		
Allen Mfg. Co., laundry	6 91	
Canadian Cleaning Co., cleaning windows	20 00	
Superintendent's Dept., labour	316 64	

69. *Thermodynamics Building.*—Continued.

Repairs and renewals ($583.27):		
A. Matthews, repairs to roof	$33 72	
Art Metropole, supplies	5 00	
G. R. Workman, drafting plans	15 00	
Superintendent's Dept., labour, $317.86; material, $211.69..	529 55	
	$1,878 70	
Less sundry credits: Repairs	13 54	
		$1,865 16

70. *Geodetic Observatory Building.*

Heat and light (supplied from Central Power Plant):		
Water ($16.20):		
City Treasurer	$16 20	
Caretaker's supplies ($24.00):		
Superintendent's Dept., material	24 00	
Cleaning ($95.40):		
Superintendent's Dept., labour	95 40	
Repairs and renewals ($226.83):		
Superintendent's Dept., labour, $46.58; material, $180.25....	226 83	
		$362 43

71. *Electrical Engineering Department.*

Supplies ($1,458.67):	
Aikenhead Hardware, hardware	$150 07
American Enameled Magnet Wire Co., wire	102 24
Baines & Peckover, steel	31 50
Brown & Sharpe Mfg. Co., gear, cutters, etc.	50 53
Canadian General Electric Co., lamps	15 52
Canadian H. W. Johns-Manville Co., fibre	169 66
Canada Metal Co., solder	8 43
Canadian National Carbon Co., batteries	20 80
Canadian S.K.F. Co., bearings	34 80
Charcoal Supply Co., charcoal	8 25
Crucible Steel Co., rods	22 76
Engineering Society, paper	11 50
Grand & Toy, castors	9 00
Gutta Percha & Rubber Co., belting	3 52
Hardware Co. of Toronto, hardware	25 64
Library Department, books lost	6 25
J. MacDonald & Co., cloth	9 50
Norman MacDonald, powder	4 65
Manhattan Electrical Supply Co., posts	16 63
Jas. Morrison Brass Mfg. Co., pipe	6 39
Northern Electric Co., supplies	16 61
Photography, Dept. of, prints	30 05
Prof. H. W. Price, disbursements: Laboratory supplies, $29.38; stationery, $7.23; carfare, $5.00; sundries, $7.42	49 03
Sanderson Pearcy Co., shellac	7 38
Sheet Metal Products Co., tubs	8 68
L. S. Starrett Co., rubber tips	4 01
University Press, printing and stationery	22 75
Wert Co., units	7 42
Weston Electrical Instrument Co., instrument	49 27
Wilkinson & Kompass, steel	46 50
Petty items (3)	4 29
Freight charges	43 59
Superintendent's Dept., labour, $99.24; material, $262.21; automatic telephones, $100.00	461 45
Apparatus ($2,986.94):	
Booth Coulter Copper & Brass Co., copper	68 70
Canadian S.K.F. Co., block, etc.	56 82
Canadian Westinghouse Co., wattmeter, etc.	281 55
Century Telephone Construction Co., transformer	23 24
De Forest Radio, tubes, etc.	309 47

71. *Electrical Engineering Department.*—Continued.

General Radio Co., meter, etc.	$93 81	
Leeds & Northrup Co., electrical instruments	952 75	
Lincoln Meter Co., meter	35 00	
Marconi Wireless Telegraph Co. of America, vacuum, tubes, etc.	149 79	
Students' Book Dept., book	5 50	
H. Tinsley & Co., transformer, etc.	142 14	
Warren Clock Co., motor clock	39 49	
Westinghouse Electric & Mfg. Co., meter, etc.	159 90	
Weston Electrical Instrument Co., apparatus	529 76	
Wilson Maeulen Co., pyrometer, indicator, etc.	138 32	
Superintendent's Dept., labour	70	
Furniture, printing and incidentals ($143.40):		
Matthew Bros., frames	81 85	
University Press, printing	61 55	
		$4,589 01

72. *Mechanical Engineering Department.*

Supplies ($696.72):		
Prof. R. W. Angus, disbursements: Hardware, $6.88; slides and blue prints, $6.53; rubber tubing, $2.75; sundries, $3.29	$19 45	
Art Metropole, paper	26 43	
Babcock & Wilcox, Ltd., bars, etc.	132 00	
Beardmore Belting Co., belting	32 30	
Garlock Packing Co., waste, cleanser, etc.	61 96	
Lyman Bros. & Co., mercury	9 88	
McColl Bros., Ltd., oil	6 50	
McKay School Equipment Co., thermometers	27 47	
Standard Colorimeter Co., peroxide	7 94	
Students' Book Dept., books	47 55	
University Press, printing and stationery	46 50	
Freight charges	7 75	
Superintendent's Dept., labour, $70.17; material, $75.82; automatic telephones, $125.00	270 99	
Apparatus ($767.29):		
Aikenhead Hardware, Ltd., hardware	113 29	
Atlas Engineering & Machine Co., gauge tester, etc.	90 00	
Canadian Westinghouse Co., transformers	114 44	
Imperial Munitions Board, drafting table	14 00	
McKay School Equipment Co., apparatus	142 56	
Photography, Dept. of, slides	9 50	
Toronto Iron Works, Ltd., tank	64 00	
Freight charges	6 50	
Superintendent's Dept., labour, $131.22; material, $81.78	213 00	
Proportion of fuel for Experimental Plant ($700.00):		
W. H. Cox Coal Co.	700 00	
Alterations in Laboratory ($150.93):		
Superintendent's Dept., labour, $70.03; material, $80.90	150 93	
		$2,314 94

73. *Applied Mechanics Department.*

Supplies ($518.78):		
Allen Mfg. Co., laundry	$3 11	
Baines & David, steel	5 94	
Baines & Peckover, iron, steel and brass	51 71	
Canadian National Carbon Co., carbon	2 48	
Wm. & J. G. Greey, castings	5 00	
Hardware Co. of Toronto, hardware and belting	120 59	
Geo. A. Matthews, rewinding armature	95 55	
Ontario Lime Co., cement	9 80	
Ontario Rubber Co., rubber goods	1 50	
Photography, Dept. of, slides, etc.	21 50	
Toronto Furnace & Crematory Co., test bars	25 00	

73. *Applied Mechanics Department.*—Continued.

John Whitfield Co., welding	$7 86	
A. R. Williams Machine Co., gauges	6 03	
Freight charges	5 58	
Superintendent's Dept., labour, $15.02; material, $42.11; automatic telephones, $100.00	157 13	
Apparatus ($177.93):		
Aikenhead Hardware, jacks	14 41	
Reihle Bros. Testing Machine Co., lever	163 52	
Testing Machine ($807.50):		
F. A. Tennison, Olsen Testing Machine	807 50	
		$1,504.21

74. *Mining Engineering Department.*

Supplies ($1,290.97):		
Aikenhead Hardware, hardware	$58 64	
Wm. Ainsworth & Sons, forceps	23 77	
Allen Mfg. Co., laundry	6 49	
Baines & Peckover, steel	2 50	
Baird & Tatlock, Ltd., chemicals	56 77	
Beardmore Belting Co., belting	9 06	
Canadian H. W. Johns Manville Co., asbestos, wood and paper, etc.	15 26	
Denver Fire Clay Co., weights, etc.	162 60	
Dominion Glass Co., glass	6 75	
F. C. Dyer, petty disbursements	2 64	
T. Eaton Co., gloves, towels, etc.	116 22	
Eimer & Amend, tube	5 84	
Fletcher, Russell & Co., stoppers, etc.	80 09	
Freyseng Cork Co., tapers	4 20	
Grand & Toy, books	8 55	
Grasselli Chemical Co., chemicals	38 22	
B. Greening Wire Co., repairs to screens	19 40	
J. T. King, disbursements: stationery and supplies, $11.43; sundries, $3.30	14 73	
Lyman Bros. & Co., chemicals	13 92	
Geo. A. Matthews, repairs to motor	7 20	
McKay School Equipment Co., supplies	62 04	
Morgan Crucible Co., crucible	21 78	
Ontario Lime Co., fire clay	15 70	
Ontario Rubber Co., stoppers	19 18	
T. S. Simms & Co., varnish, brushes	34 42	
Students' Book Dept., book covers	3 60	
Superior Mfg. Co., date stamp	6 15	
Will Corporation, flasks, etc.	42 13	
University Press, printing and stationery	50 95	
Freight charges	53 95	
Superintendent's Dept., labour, $51.32; material, $76.90; automatic telephones, $200.00	328 22	
Apparatus ($372.57):		
Aikenhead Hardware, hardware	16 50	
Boston Gear Works, ball bearings	17 17	
Connersville Blower Co., valves	5 62	
Denver Fire Clay Co., anvils, etc.	45 71	
A. Matthews, Ltd., tank, etc.	13 96	
Will Corporation, burettes, etc.	23 97	
Freight charges	20 47	
Superintendent's Dept., labour, $131.38; material, $97.79	229 17	
		$1,663 54

75. *Metallurgical Engineering Department.*

Supplies ($519.38):		
Paul O. Abbe, jars, covers and gaskets	$37 75	
Aikenhead Hardware, hardware	29 21	
Prof. G. A. Guess, disbursements: laboratory supplies	11 25	
Photography, Dept. of, slides	10 25	

75. *Metallurgical Engineering Department.*—Continued.

Scientific Materials Co., cylinders and jars	$38 84	
Toronto Hydro-Electric System, service	144 00	
Freight charges	12 83	
Superintendent's Dept., labour, $115.68; material, $19.57; automatic telephones, $100.00	235 25	
Apparatus ($358.28):		
Leeds & Northrup Co., optical pyrometer, etc.	302 28	
Geo. A. Matthews, re-winding motor	10 15	
Superintendent's Dept., labour, $30.05; material, $15.80	45 85	
		$877 66

76. *Ferro-Metallurgy.*

(Nothing Spent.)

77. *Surveying Department.*

Supplies ($401.10):		
Art Metropole, blue prints	$1 80	
Consolidated Optical Co., transits, steel tapes, etc.	242 80	
Engineering Society, stationery	15 65	
L. B. Stewart, disbursements: laboratory supplies, $10.80; office supplies and sundries, $9.20	20 00	
E. R. Watts & Son, prints	4 68	
Freight charges	5 46	
Superintendent's Dept., labour, $10.10; material, 61c.; automatic telephones, $100.00	110 71	
Apparatus ($772.82):		
Consolidated Optical Co., chaining arrows	223 00	
Keuffel & Esser Co., rods	67 83	
P. B. Street, transit	100 00	
E. R. Watts & Son, apparatus	381 99	
Buildings for Summer Camp ($8,464.45):		
Superintendent's Dept., labour, $2,541.85; material, $4,074.16; travelling expenses of workmen, $90.35	6,706 36	
D. J. Hartle, provisions, cartage, etc., $494.92; labour, $121.18	616 10	
W. F. & R. E. Jones, mattresses, beds, etc.	610 59	
H. Robertson, food supplies	17 50	
Fred. Sawyer, material for ice house, $307.00; labour, $139.00	446 00	
Prof. L. B. Stewart, travelling expenses	27 90	
C. Turnbull, clearing site	40 00	
Placing Concrete Monuments ($2,216.12):		
S. R. Crerar, remuneration for summer work, $600.00; travelling and living expenses, $113.70	713 70	
E. W. Banting, remuneration for summer work, $600.00; travelling and living expenses, $129.15	729 15	
J. W. Melson, remuneration for summer work, $400.00; travelling and living expenses, $119.15	519 15	
Dean Bros., castings	51 50	
D. J. Hartle, hardware, etc.	108 17	
A. Langdon, punt, etc.	28 30	
J. J. Mortimer, lumber	20 00	
F. Sawyer, teaming	46 15	
	$11,854 49	
Less sundry credits $4 45		
Laboratory deposits 100 00		
Sale of instruments 323 00		
	427 45	
		$11,427 04

78. *Applied Chemistry Department.*

Supplies ($3,877.06):		
Allen Mfg. Co., laundry	$7 92	
Aikenhead Hardware, hardware	21 48	
Prof. J. W. Bain, petty disbursements	12 08	

78. *Applied Chemistry Department.*—Continued.

J. T. Baker Chemical Co., alcohol	$4 52	
J. Bisby & Co., wire	4 02	
Boeckh Co., brushes	10 13	
British American Oil Co., wax	7 25	
Canada Metal Co., zinc, etc.	12 00	
Canadian Carbonate Co., gas	3 60	
Chemical Rubber Co., stoppers	13 20	
Consolidated Optical Co., lens	7 00	
T. Eaton Co., supplies	6 40	
Eimer & Amend, sulphur dioxide	6 72	
Freyseng Cork Co., tapers and corks	35 56	
Grasselli Chemical Co., chemicals	135 58	
Fred. Page Higgins, trichloride	30 00	
International Glass Co., tubing, etc.	91 28	
J. Johnston, compensation for clothing burned in laboratory	15 00	
L'Air Liquide Society, cylinder and oxygen	16 06	
Lake Simcoe Ice Supply Co., ice	12 25	
Lyman Bros. & Co., drugs	337 32	
Norman MacDonald, carborundum	3 00	
Mallinckrodt Chemical Works, chemicals	171 16	
Gordon, McKay & Co., towels	23 77	
McKay School Equipment Co., dishes, flasks, etc.	1,732 22	
Jas. Morrison Brass Mfg. Co., guage	3 85	
Ontario Rubber Co., corks, tubing and stoppers	154 35	
Photography, Dept. of, slides	13 05	
Chas. Potter, condensers	5 50	
Richards Glass Co., glassware, bottles, etc.	76 11	
L. Joslyn Rogers, balance	162 00	
Rosebrugh Chemical Corporation, chemicals	10 48	
Sheet Metal Products Co., pans	50 00	
Standard Colorimeter Co., fuse wire	3 36	
Students' Book Dept., book	1 40	
United Typewriter Co., ribbons and repairs	6 30	
University Press, printing	10 90	
T. C. Wheaton Co., plugs	37 75	
G. H. Wilkins Co., tools	2 69	
W. Lloyd Wood, alcohol	16 94	
Freight charges	65 50	
Superintendent's Dept., labour, $223.04; material, $164.32; automatic telephones, $150.00	537 36	
Apparatus ($802.33):		
Brown Instrument Co., thermometer	10 37	
Geo. M. Hendry Co., oven	130 00	
A. H. Thomas & Co., analytical balances	528 01	
Superintendent's Dept., labour, $101.93; material, $32.02.	133 95	
	$4,679 39	
Less received from Students' account $173 35		
Sale of material 63 00		
	236 35	
		$4,443 04

79. *Electro-Chemistry Department.*

Supplies ($899.69):		
Allen Mfg. Co., laundry	$3 14	
J. T. Baker Chemical Co., chemicals	220 94	
Black Lake Asbestos & Chrome Co., bricks	24 42	
Booth Coulter Copper & Brass Co., copper	8 45	
Contractors' Supply Co., fire clay	25 50	
Davis Slate & Mfg. Co., slate	4 40	
Dominion Glass Co., glassware	25 30	
T. Eaton Co., towels	9 20	
Exolon Co., firesand	8 89	
Eureka Mineral Wool & Asbestos Co., asbestos	23 45	
Freyseng Cork Co., corks	10 65	

79. *Electro-Chemistry Department.*—Continued.

G. M. Hendry Co., glass tubing	$5 50	
Lake Simcoe Ice Supply Co., ice	84 50	
Lyman Bros. & Co., drugs	44 11	
McKay School Equipment Co., supplies	23 28	
Geo. B. Meadows, wire	4 50	
Prof. W. Lash Miller, disbursements: laboratory supplies, $36.82; stationery and sundries, $8.79	45 61	
National Drug & Chemical Co., drugs	13 50	
Norton & Co., discs	4 37	
Photography, Dept. of, prints	15 60	
E. Pullan, cloths	7 00	
Rogers Electric Co., electrical supplies	68 57	
Sanderson, Pearcy & Co., paint	3 50	
University Press, printing and stationery	10 35	
Freight charges	25 87	
Superintendent's Dept., labour, $13.95; material, $65.14; automatic telephones, $100.00	179 09	
Apparatus ($1,262.28):		
Adams Furniture Co., stools	8 10	
Adjustable Skylight Works, boxes	30 00	
Geo. Brimstin, keys	32 40	
Canadian Fairbanks-Morse Co., trucks for furnace	74 00	
Canadian General Electric Co., motor	31 50	
Central Scientific Co., weights	11 70	
Emil Greiner Co., flasks, etc.	68 51	
McKay School Equipment Co., tubing, etc.	13 91	
W. R. McKee, repairs to apparatus	37 34	
W. W. Wells, rheostat	52 50	
Westinghouse Electric & Mfg. Co., brackets	2 79	
Will Corporation, glass tubing balances, etc.	617 39	
Freight charges	17 06	
Superintendent's Dept., labour, $199.58; material, $65.50	265 08	
	$2,161 97	
Less sundry credits	29 61	
		$2,132 36

80. *Architecture and Drawing Departments.*

(*a*) Architecture:		
Supplies ($319.16):		
Aikenhead Hardware, hardware	$30 85	
Allen Mfg. Co., laundry	4 48	
Balmer & Blakely, gelatine	16 25	
Corrugated Paper Box Co., boxes	9 45	
T. Eaton Co., supplies	30 18	
Ontario Lime Co., plaster	34 25	
Students' Book Dept., books	35 30	
Toronto Wood Turning Works, turning	9 50	
Petty items (4)	6 01	
University Press, printing, etc.	22 25	
Superintendent's Dept., labour, $25.30; material, $49.03	74 33	
Sundry subscriptions:		
American Architect	13 69	
Architectural Record Co.	5 04	
Architectural Review	8 20	
J. Lane Co.	6 24	
Rogers Manson Co.	6 45	
Chas. Scribner's Sons	6 69	
Apparatus ($275.29):		
Aikenhead Hardware, hardware	25 33	
T. Eaton Co., stools, etc.	41 00	
Topley Co., lens and balopticon	47 70	
Wrought Iron Range Co., boiler	8 85	
Superintendent's Dept., labour, $113.89; material, $38.52	152 41	

80. *Architecture and Drawing Departments.*—Continued.

Assistance and models for life class ($31.50):		
Prof. C. H. C. Wright, reimbursement for payment to models	$31 50	
	$625 95	
(*b*) Drawing:		
Supplies ($234.90):		
Art Metropole, pencils, etc.	$35 11	
Engineering Society, supplies	18 25	
Geo. E. Grove, keys	5 10	
Hardware Co. of Toronto, hardware	11 62	
Students' Book Dept., stationery	5 45	
Superior Mfg. Co., rubber stamps	6 35	
United Typewriter Co., inspection	5 25	
University Press, stationery	80 60	
Petty items (2)	2 00	
Superintendent's Dept., labour, $31.40; material, $33.77	65 17	
Apparatus ($166.10):		
Art Metropole, sundries	9 80	
T. Eaton Co., stools	46 25	
Students' Book Dept., books	35 05	
Superintendent's Dept., labour	75 00	
Drafting Tables ($791.80):		
Superintendent's Dept., labour, $410.17; material, 381.63	791 80	
Printing Instruction Sheets ($130.25):		
University Press, printing	130 25	
		$1,949 00

81. *Engineering Physics and Photography.*

(*a*) Engineering Physics:		
Supplies ($201.95):		
Aikenhead Hardware, hardware	$6 22	
G. L. Anderson, disbursements	10 98	
Canadian General Electric Co., supplies	13 25	
A. D. Gorrie & Co., head lamps	13 65	
Geo. M. Hendry Co., supplies	30 26	
Lake Simcoe Ice Supply Co., ice	4 65	
Macbeth-Evans Glass Co., glassware	11 00	
Routery Bros., lathing and plastering	12 00	
Taylor Instrument Co., chart	4 25	
Superintendent's Dept., labour, $21.58; material, $24.11; automatic telephone, $50	95 69	
Apparatus ($304.10):		
W. H. Cooper & Co., battery	38 50	
Leeds & Northrup Co., screens	264 16	
Freight charges	1 44	
	$506 05	
(*b*) Photography:		
Supplies ($680.28):		
Allen Mfg. Co., laundry	$1 77	
Ansco Co., photo supplies	51 94	
Canadian Kodak Co., supplies	371 12	
Canadian Westinghouse Co., lamps	14 52	
C. F. Cole Co., blueprints, etc.	38 90	
T. Eaton Co., cloth, etc.	10 90	
Evening Telegram, advertising	2 93	
Geo. M. Hendry Co., weights	2 00	
Lyman Bros., drugs	74 90	
W. J. Moore, repairing camera	7 25	
Ramsay & Taylor, blotters	5 39	
Engineering Society, stationery	9 25	
Topley Co., objectives	22 50	
Toronto Star, advertising	1 16	

81. *Engineering Physics and Photography.*—Continued.

Freight charges	13 35	
Superintendent's Dept., labour, $2.15; material, $25c.; automatic telephone, $50.00	52 40	
Apparatus ($264.44):		
Canadian General Electric Co., stereopticon	28 80	
T. Eaton Co., camera, etc.	87 55	
F. R. Lockhart, camera, etc.	40 00	
Weston Electrical Instrument Co., volts	3 76	
A. H. Winter Joyner, Ltd., voltmeter, etc.	78 75	
Superintendent's Dept., labour, $15.23; material, $10.35	25 58	
Messenger Service ($27.00):		
Miss M. Murray, 3 weeks at $9.00 per week	27 00	
	$1,477 77	
Less received for work done for various departments (including accounts receivable, $142.93)	487 53	
		$990 24

82. *General Expenses.*

Stationery, printing and office supplies, etc. ($1,987.99):		
The Bursar, postage supplied	$221 00	
T. Eaton Co., typewriter stand	31 50	
Engineering Society, record book	1 35	
A. T. Laing, petty disbursements: Cables, telegrams and telephone calls, $28.06; car fare and sundries, $3.13	31 19	
Lowe, Martin Co., printing cards	67 75	
Might Directories, Ltd., directory	15 15	
Office Specialty Mfg. Co., table and chair, etc.	96 00	
United Typewriter Co., typewriter and inspections	110 60	
University Press, printing and stationery	1,259 15	
Freight charges	4 33	
Superintendent's Dept., labour, $108.66; material, $41.31	149 97	
Clerical Assistance ($592.92):		
Miss Edith Birkett, 23 weeks and 4 days at $20.00 per week	473 33	
Miss L. Birkett, 6 weeks and 5 days at $17.50 per week	119 59	
Messenger Service ($253.18):		
Chas. Buckhurst, 12 weeks at $8.00 per week	96 00	
E. Cook, 10 weeks at $7.50 per week	75 00	
Jos. Heffron, 7 weeks and 5 days at $8.00 per week	62 68	
S. Matthews, 13 weeks at $9.00 per week	19 50	
		$2,834 09
		$207,246 17

V. Faculty of Household Science.

83. *Salaries.*

Household Science Department ($9,550.00):		
Miss A. L. Laird, Associate Professor, 12 mos. to 30th June	$3,100 00	
Lecturers (Sessional):		
Miss L. L. Ockley (Special Course)	2,000 00	
Miss E. M. Hickmans (paid from Massey-Treble bequest)	1,800 00	
Miss Hannah Hill	1,650 00	
Instructors (Sessional):		
Miss E. V. Millar (part time to Special Course)	1,250 00	
Miss Florence Graper (part time to Special Course)	1,000 00	
Miss Edna Park, Laboratory Assistant and Research Worker (Sessional, part time), at $750.00, of which $200.00 paid from Massey-Treble bequest; paid also in Education)	750 00	
Miss Frances J. Tufford, Research Worker (Sessional—paid from Massey-Treble bequest)	750 00	
	$12,300 00	
Less charged to Massey-Treble bequest	2,750 00	
	$9,550 00	

83. *Salaries.*—Continued.

Food Chemistry Department ($4.450.00):		
Dr. C. C. Benson, Associate Professor, Physiological Chemistry (also Secretary to Faculty), 12 mos. to 30th June	$3.100 00	
Miss C. M. Harwood, Instructor (Sessional)	750 00	
Miss E. F. D. Martin, Assistant (Sessional—part time to Special Course)	600 00	
		$14.000 00

84. *Household Science Building and Department.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($249.68):		
Consumers' Gas. Co.	$249 68	
Water ($281.39):		
City Treasurer	281 39	
Caretaker's supplies ($173.72):		
Superintendent's Dept., labour, $6.06; material, $167.66	173 72	
Cleaning ($1.685.28):		
Canadian Cleaning Co., cleaning windows	30 00	
Superintendent's Dept., labour	1.655 28	
Repairs and renewals ($1,279.98):		
Art Metropole, draughting supplies	5 00	
Wm. Bartlett & Son, shades	9 31	
City Treasurer, elevator license	5 00	
Italian Mosaic & Marble Co., tiling, cement, etc.	51 35	
Johnson Temperature Regulating Co., repairs	54 96	
Geo. A. Matthews, rewinding armature	4 90	
G. R. Workman, draughting plans	15 00	
Superintendent's Dept., labour, $463.67; material, $670.79	1.134 46	
Caretaker, F. Hanmer, 12 months to 30 June (with house, heat and light)	975 00	
		$4.645 05
(*b*) Maintenance of Department:		
(1) Household Science:		
Laboratory supplies ($902.97):		
Canadian Milk Products, Ltd., milk	$12 00	
Farmers' Dairy Co., milk	45 25	
Harris Abattoir Co., provisions and meat	99 10	
Lyman Bros. & Co., chemicals	35 84	
McKay School Equipment Co., chemicals, flasks, etc.	125 42	
Ontario Rubber Co., tubing	3 30	
W. J. Parks, groceries	59 68	
A. Provan, groceries	522 38	
Laboratory attendance ($862.50):		
Mrs. Bowes, 4½ months at $42.00; 2 months at 45.00; 3 months at $48.00	423 60	
Miss Conacher, 4½ months at $42.00; 2 months at $45.00; 3 months at $48.00	423 00	
Mrs. Higeley, 55 hours at 30c.	16 50	
Equipment and incidentals ($143.54):		
G. M. Hendry Co., weights, etc.	87 42	
United Typewriter Co., inspections	5 25	
Superintendent's Dept., labour, 87c.; automatic telephone, $50.00	50 87	
Use of city schools ($900.00):		
Board of Education, City of Toronto, 6 Household Science critics at $100,00 a Session	600 00	
Six classrooms at $50.00	300 00	
Books ($50.00):		
Students' Book Dept., books	50 00	
New Laboratory and Equipment ($842.85):		
Marble & Tiles, Ltd., tiling	411 00	

84. *Household Science Building and Department.*—Continued.

Routery Bros., lathing and plastering		$150 00	
Superintendent's Dept., labour, $256.59; material, $25.26		281 85	
		$3,701 86	
Less sundry credits:			
Breakages	$75 67		
Equipment charged to Lillian Massey-Treble bequest	842 85		
		918 52	
			$2,783 34
(2) Food Chemistry:			
Maintenance ($655.83):			
J. T. Baker Chemical Co., chemicals		40 01	
Beaver Flint Glass Co., glass		3 70	
Dr. C. C. Benson, disbursements:			
Laboratory and office supplies, $28.57; food supplies, $22.02; cleaning material, $17.06		67 65	
Brown Instrument Co., thermometers		55 99	
Canada Flint Glass Co., repairs		83	
Canadian A.M.C. No. 2, chemicals		8 37	
T. Eaton Co., towels, etc.		23 63	
Eimer & Amend, burners, bottles, etc.		87 66	
Freyseng Cork Co., corks		6 87	
General Chemical Co., chemicals		52 11	
J. F. Hartz Co., chemicals		41 17	
G. M. Hendry Co., tripods, etc.		56 44	
Wm. Hiergesell & Son, thermometer		12 53	
Lyman Bros., chemicals		22 69	
McKay School Equipment Co., flasks		32 14	
National Drug & Chemical Co., chemicals		14 70	
Ontario Rubber Co., tubing		9 32	
Students' Book Dept., books		16 05	
A. H. Thomas Co., glass, etc.		26 35	
S. S. White Co., oxygen		2 40	
University Press, printing		6 75	
Freight charges		15 67	
Superintendent's Dept., labour, 85c; material, $1.95; automatic telephone, $50.00		52 80	
		$655 83	
Laboratory attendance ($160.16):			
Mrs. Brightwell, 403 hours at 30c and car fare		124 35	
Sundry persons, small sums		35 81	
		$815 99	
Less sundry credits, sale of pamphlets, $16.25; breakages, $230.97		247 22	
			$568 77
(3) General Expenses:			
Stationery, printing, office supplies and incidentals ($128.05):			
The Bursar, postage supplied		26 00	
University Press, printing		52 05	
Superintendent's Dept., labour, $12.48; material, $12.52; automatic telephone, $25.00		50 00	
Clerical assistance ($500.00):			
Mrs. O. B. Ritchie, 8 months at $62.50		500 00	
			$628 05
			$22,625 21

VI. Faculty of Education.

85. *Salaries.*

	Payment to Officer.	Superannuation reservation under 7 Geo. V, Cap. 58.
Professors, each 12 mos. to 30 June:		
W. Pakenham, History and Science of Education (also Dean of the Faculty) at $5,000	$4,875 00	$125 00
H. J. Crawford, Methods in Classics, also Headmaster of University Schools at $4,359	4,241 25	108 75
P. Sandiford, Associate Professor, 12 mos. to 30 June, at $4,000	3,900 00	100 00
Assistant Professors in Methods, also Chief Instructors, University Schools, 12 mos. to 30 June:		
G. A. Cornish, Science, at $3,500	3,412 50	87 50
J. T. Crawford, Mathematics, at $3,500	3,412 50	87 50
G. M. Jones, English, at $3,500	3,412 50	87 50
W. C. Ferguson, French and German, at $3,350	3,266 25	83 75
F. E. Coombs, Elementary Subjects, at $3,350	3,266 25	83 75
S. W. Perry, Lecturer in Methods, also Chief Instructor, University Schools, Art and Commercial Work, 12 mos. to 30 June, at $3,100	3,022 50	77 50
Lecturers in Faculty of Education:		
W. J. Dunlop, Elementary Subjects, 12 mos. to 30 June, at $2,850	2,778 75	71 25
Mrs. Muriel Sinclair (Sessional), 9 mos. at $260	2,281 50	58 50
Instructors in Faculty and Assistant Instructors, University Schools, each 12 mos. to 30 June:		
A. N. Scarrow, Manual Training, at $2,850	2,778 75	71 25
G. N. Bramfitt, Physical Training, at $2,600	2,535 00	65 00
Special Instructors in Faculty (Sessional):		
A. T. Cringan, Music, at $600	585 00	15 00
Miss A. E. Robertson	100 00	.....
Miss E. Park, Foods and House Management (paid also in Household Science)	100 00	.....
Mrs. Mary Halbus, Reading and Dramatics, at $500	487 50	12 50
Assistant Instructors, University Schools, each 12 mos. to 30 June:		
T. M. Porter, at $3,100	3,022 50	77 50
H. A. Grainger, at $3,100 (paid also in Special Courses for Returned Men)	3,022 50	77 50
J. A. Irwin, at $3,000	2,925 00	75 00
J. O. Carlisle, at $2,850	2,778 75	71 25
J. G. Workman, at $2,850	2,778 75	71 25
G. A. Cline, at $2,600 (paid also in Special Courses for Returned Men)	2,535 00	65 00
W. L. C. Richardson, at $2,600	2,535 00	65 00
H. B. Kilgour, at $2,000	1,950 00	50 00
N. L. Murch, at $2,500	2,437 50	62 50
D. E. Hamilton, at $2,500	2,437 50	62 50
E. L. Daniher, at $2,250	2,193 75	56 25
W. H. Williams, at $3,000	2,925 00	75 00
W. J. Lougheed, at $3,100 (paid also in Mathematics)	3,022 50	77 50
Assistant Instructors (Sessional), each salary for 10 teaching months at $210 per month:		
Frank Halbus	2,047 50	52 50
David H. Axon	2,047 50	52 50
H. G. Manning, Assistant Instructor, at $2,600 per annum, 1 month to 31 July (resigned), $216.66 less charged to Special Courses for Returned Men, $108.33	105 62	2 71
Supply Teachers at $4 per half day:		
P. Daniels, 16 half days	64 00	.....
C. R. Ashdown, 6 half days	24 00	.....
Miss H. Hoffman, 4 half days	16 00	.....
R. A. Stewart, 3 half days	12 00	.....
S. A. Watson, 2 half days	8 00	.....
L. M. Keith, 1 half day	4 00	.....
W. A. Kenyon, 7 days at $6, $42; 4 half days at $4, $16	58 00	.....

85. *Salaries.*—Continued.

	Payment to Officer.	Superannuation reservation under 7 Geo. V. Cap. 58.
Miss L. Swinarton, Secretary, Dean's Office, 12 mos. to 30 June	$1,100 00	.....
Miss Gladys Cotter, Clerk and Librarian, 12 mos. to 30 June..	950 00	.....
Clerk in Headmaster's Office at $950 per annum:		
Mrs. Katherine E. Freeland, 9½ mos. to 15 April (resigned)	752 10	.....
Miss Emily Fraser, 15 April to 30 June	197 90	.....
	$86,405 62	$2,128 71
		$86,405 62
		$88,534 33

86. *Education Building and Department.*

(*a*) Maintenance of Building:		
Fuel ($2,330.50):		
Century Coal Co.	$47 69	
W. H. Cox Coal Co.	1,455 86	
Wm. McGill & Co.	614 92	
Britnell & Co., Ltd., teaming	212 03	
Light ($667.36):		
Toronto Electric Light Co.	529 39	
Consumers' Gas Co.	137 97	
Water ($365.48):		
City Treasurer	365 48	
Caretakers' supplies ($399.73):		
Superintendent's Dept., labour, $8.05; material, $391.68	399 73	
Cleaning ($2,181.76):		
Canadian Cleaning Co., cleaning windows	50 00	
Superintendent's Dept., labour	2,131 76	
Repairs and renewals ($1,080.20):		
Wm. Bartlett & Son, shades	29 88	
Canadian Power Regulator Co., repairs to thermostats	16 50	
A. Matthews, Ltd., repairs to roof	86 72	
McKay School Equipment Co., desks	48 50	
Superintendent's Department, labour, $540.49; material, $358.11	898 60	
	$7,025 03	
Less sundry credits, cleaning	139 24	
	$6,885 79	
Engineer and caretaker, S. Hunter, 12 months to 30 June	$1,400 00	
Firemen ($418.35):		
W. Odd, 13 hours at 45c	5 85	
C. Fly, 5 months and 13 days at $75 per month.....	412 50	
		$8,704 14
(*b*) Maintenance of Annex:		
Fuel ($285.78):		
W. H. Cox Coal Co., fuel	$285 78	
Light ($107.86):		
Consumers' Gas Co.	57 09	
Toronto Electric Light Co.	50 77	
Water ($24.50):		
City Treasurer	24 50	
Caretaker's supplies ($59.25):		
Superintendent's Dept., labour, 53c; material, $58.72..	59 25	
Cleaning ($270.00):		
Canadian Cleaning Co., cleaning windows	6 00	
Superintendent's Dept., labour	264 00	
Repairs and renewals ($278.37):		
Routery Bros., repairs to ceiling	15 00	
Superintendent's Department, labour, $107.68; material, $155.69	263 37	
	$1,025 76	
Less credit, cleaning	1 00	
		$1,024 76

86. *Education Building and Department.*—Continued.

(*c*) Maintenance of Department:	
Use of city and rural schools ($7,925.00):	
Board of Education, City of Toronto, Practice-teaching privileges under agreement	$7,775 00
Public School Trustees, Newtonbrook, Practice-teaching privileges under agreement	150 00
Laboratory assistance ($100.98):	
Mrs. McKerrigan	51 14
Mrs. Robertson	49 84
Office supplies, printing, postage and incidentals ($1,326.54):	
The Bursar, postage supplied	205 00
T. Eaton Co., towelling	3 70
Field, Love & House, typewriter inspections	12 00
Office Specialty Mfg. Co., cabinet guides, etc.	59 50
Prof. W. Pakenham, disbursements:	
Car fares, $15.00; telegrams, $6.62; office supplies, $5.65; sundries, $3.47	30 74
United Typewriter Co., inspections, etc.	84 43
University Press, stationery and printing	903 95
Superintendent's Dept., labour, $19.41; material, $7.81	27 22
General supplies and apparatus for class-room use, including lockers and furniture ($2,185.59):	
Acid Proof Ink Co., ink	40 00
Aikenhead Hardware Co., hardware	24 07
Canadian Carbonate Co., gas	3 60
C. F. Cole Co., drafting instrument	4 75
Denoyer Geppertt Co., maps	32 48
T. Eaton Co., towelling	103 92
Education, Dept. of, Parliament Bldgs., copies of "Great War"	10 00
P. W. Ellis, polishing head	8 50
Gourlay, Winter & Leeming, piano hire	45 00
Geo. M. Hendry Co., tubing, crucibles, etc.	659 05
Harvey Lloyd, ink	13 50
Lyman Bros., chemicals	40 62
Mackenzie & Co., framing pictures	40 10
McKay School Equipment Co., chairs	139 36
Methodist Book & Publishing Co., slides	56 10
National Geographic Society, pictures	3 70
Office Specialty Mfg. Co., cases	7 15
Oxford University Press, booklets	14 48
Pathescope of Canada, lamps	82 00
T. S. Plaskett, repairs to optical stand	10 00
J. G. Ramsay & Co., plates	31 31
Research Dept. of the Training School at Vineland, N.J., books	5 68
"The School," volume	12 40
Scientific Material Co., chemicals	51 96
Students' Book Dept., books, etc.	230 64
Superintendent of Documents, Washington	8 12
Topley Co., lamp	14 50
University of Illinois, reading lists	4 56
University Press, stationery and printing	85 30
Robt. M. Williams, engrossing	24 50
World Book Co., books	14 63
Petty items (5)	7 24
Freight charges	5 47
Superintendent's Dept., labour, $206.91; material, $143.99	350 90
Athletics ($799.01):	
Aura Lee Club, use of athletic grounds	200 00
W. Pritchard, attendant at rink, 8 weeks, 5 days at $20.00 per week, $178.10; 4½ hours overtime, $1.90	180 00
Ryrie Bros., medals, bars and engraving	190 75
A. G. Spalding & Bros., balls and bats	38 60
University Press, programmes, etc.	57 50
Superintendent's Dept., labour, $100.59; material, $31.57	132 16

86. *Education Building and Department.*—Continued.

Lunch-room equipment ($49.42):		
T. Eaton Co., teaspoons, etc.	$15 27	
Geo. Sparrow & Co., utensils	25 15	
Superintendent's Dept., material	9 00	
Pianist's services at physical culture classes ($49.25):		
Miss J. L. Goodman, 59 periods at 75c, $44.25; 5 hours at $1.00, $5.00	49 25	
Messenger service ($397.58):		
Miss Ella Campbell, 38½ weeks at $9.00	346 50	
B. Tipping, 6 weeks, 10 days, at $6.50 per week	51 08	
	$12,833 37	
Less sundry credits: Freight, $5.91; Y.M.C.A., use of grounds, $10.00	15 91	
		$12,817 46
		$111,080 69

VII. Faculty of Forestry.

87. *Salaries.*

C. D. Howe, Associate Professor, 12 mos. to 30 June, $3,250; Acting Dean of Faculty, $500	$3,750 00	
Assistant Professors, each 12 mos. to 30 June:		
J. H. White	3,000 00	
W. N. Millar	3,000 00	
H. A. Parker, Laboratory Assistant (Sessional)	500 00	
Miss E. W. Mills, Secretary in Dean's Office, 12 mos. to 30 June	1,000 00	
		$11,250 00

88. *Forestry Building and Department.*

(*a*) Maintenance of Building:		
Fuel ($1,240.05):		
Britnell & Co.	$103 71	
Connell Anthracite Mining Co.	262 06	
W. H. Cox Coal Co.	754 28	
Wm. McGill Coal Co.	120 00	
Light ($312.93):		
Toronto Electric Light Co.	199 90	
Consumers' Gas Co.	113 03	
Water ($74.71):		
City Treasurer	74 71	
Caretaker's supplies ($70.94):		
Superintendent's Dept., labour, $1.41; material, $69.53.	70 94	
Cleaning ($396.92):		
Allen Mfg. Co., laundry	5 14	
Canadian Cleaning Co., cleaning windows	7 00	
Superintendent's Dept., labour	384 78	
Repairs and renewals ($353.84):		
Wm. Bartlett & Son, shades	4 49	
Ryrie Bros., Ltd., repairing clock	8 50	
Superintendent's Dept., labour, $62.94; material, $277.91	340 85	
Caretaker, George Ward, 12 months to 30 June	900 00	
	$3,349 39	
Less credit (repairs)	4 15	
		$3,345 24
(*b*) Maintenance of Department:		
Laboratory supplies and apparatus ($160.77):		
Eugene Dietzgen Co., levels, etc.	$92 96	
Prof. C. D. Howe, petty disbursements	5 45	
Photography, Dept. of, slides	6 25	
The Topley Co., postcard carriers	11 49	

88. *Forestry Building and Department.*—Continued.

University Press, printing and stationery	$38 25	
Superintendent's Dept., labour	6 37	
Office supplies, etc. ($385.85):		
The Bursar, postage supplied	25 00	
Dominion Press Clipping Agency, clippings	15 00	
Grand & Toy, Ltd., stationery	6 00	
Prof. C. D. Howe, disbursements:		
Telegrams, $8.01; stationery and supplies, $4.47	12 48	
Lowe-Martin Co., cases	32 70	
Office Specialty Mfg. Co., supplies	69 59	
Students' Book Dept., books	28 20	
United Typewriter Co., inspection	6 75	
Mrs. Ward, towels	3 50	
Western Forestry & Conservation Association, Fire Fighters' Manual	10 53	
J. H. White, petty disbursements	5 05	
University Press, printing and stationery	146 75	
Petty items (4)	4 70	
Superintendent's Dept., labour, $5.95; material, $13.65.	19 60	
Practice Camp supplies, travel and special lectures ($121.25):		
Prof. C. D. Howe, travelling expenses	80 70	
Ellwood Wilson, lecture expenses	40 55	
		$667 87
		$15,263 11

VIII. (89) Faculty of Music.

Honoraria to Dean and Lecturers ($1,250.00):		
Dr. A. S. Vogt, Dean of Faculty	$250 00	
F. A. Mouré, University Organist and Lecturer on History of Music (paid also as Bursar)	250 00	
Dr. H. Willan, Lecturer on Theory of Music	250 00	
Dr. Albert Ham, Lecturer on Church Music	250 00	
H. A. Fricker, Lecturer on Choral and Orchestral Music	250 00	
Secretarial allowance ($200.00):		
Miss A. W. Patterson (paid also as President's Secretary)	200 00	
Printing calendar, postage and incidental expenses ($378.65):		
The Bursar, postage supplied	50 00	
Nordheimer Piano & Music Co., use of pianos, tuning, etc.	22 00	
University College Literary & Scientific Society, use of piano	2 00	
University Press, printing and stationery	304 65	
	$1,828 65	
Less received from advertisements in calendar	60 00	
		$1,768 65

IX. University Extension and Social Service.

90. *University Extension.*

(*a*) Summer Session, 1919 ($1,565.00):		
Remuneration to Instructors:		
W. A. Clemens	$250 00	
F. C. A. Jeanneret	65 00	
W. A. Kirkwood	250 00	
T. C. Newman	250 00	
Miss M. G. Reid	50 00	
C. B. Sissons	250 00	
G. M. Smith	100 00	
R. B. Thomson	250 00	
R. Hodder Williams	100 00	

90. *University Extension.*—Continued.

(*b*) Correspondence Courses between Summer Sessions ($894.00):

Remuneration to Instructors:	
Faculty Entrance, Normal Entrance and Commerce ($484.00):	
J. O. Carlisle	$114 00
G. A. Cline	77 50
W. C. Ferguson	36 00
W. H. Fletcher	12 00
H. A. Grainger	72 00
W. E. Hamilton	28 50
W. J. Lougheed	37 50
W. Ward	25 00
W. H. Williams	31 50
J. G. Workman	50 00
Arts Course ($410.00):	
C. E. Auger	80 00
W. H. Clawson	84 00
G. E. Jackson	48 00
F. C. A. Jeanneret	40 00
W. A. Kirkwood	16 00
H. S. McKellar	92 00
Miss M. G. Reid	5 00
J. Satterley	45 00

(*c*) Teachers' Courses ($400.00):

Remuneration to Instructors:	
C. E. Auger	200 00
Pelham Edgar	200 00

(*d*) Local Lectures ($70.00):

	Total Payment.	Fees and Expenses Paid by Local Centres.	
G. S. Brett	$13 00	$5 00	$3 00
E. F. Burton	13 00	5 00	3 00
W. H. Clawson	14 80	5 00	4 80
J. A. Craig	34 95	5 00	19 95
N. W. De Witt	5 00	.....	.....
L. E. Horning	17 85	5 00	7 85
D. R. Keys	15 50	5 00	50
J. F. McLaughlin	29 30	10 00	9 30
W. A. Parks	13 00	5 00	3 00
P. Sandiford	32 80	5 00	22 80
M. W. Wallace	13 15	5 00	3 15
	$202 35	$55 00	$77 35
Paid by Local Centres	132 35		
Paid by University			$70 00

(*e*) Courses for Workers' Educational Association ($1,011.00):	
Workers' Educational Association, to pay Instructors	$1,000 00
Sundry expenses for attendance:	
R. Brown	4 00
Mrs. Fairbrass	5 00
J. Wicksey	2 00
(*f*) Evening Tutorial Classes ($938.00):	
Barker Fairley	400 00
G. E. Jackson	400 00
M. W. Wallace	138 00
(*g*) Office expenses ($4,040.61):	
A. H. Abbott, allowance as Secretary, 12 months to 30 June	1,850 00
Miss H. M. Latter, Assistant Secretary, 12 months to 30 June	1,100 00

90. *University Extension.*—Continued.

Clerical assistance:			
Miss Edith Cook, 20 weeks at $15.00, $300.00; 10 weeks at $15.00 (half time), $75.00; 22 weeks, 3 days, at $10.00 per week, $227.50		$602 50	
Stationery, printing, office supplies and incidentals:			
Dr. A. H. Abbott, disbursements, postage		28 50	
The Bursar, postage supplied		60 00	
Mrs. Fairbrass, cleaning		16 00	
Grand & Toy, Ltd., transfer case		2 00	
Toronto Weekly Railway & Steamboat Guide, subscription		4 00	
United Typewriter Co., repairs		1 00	
Expenses *re* Reception for Summer Session Students:			
George Coles, Ltd.		11 70	
F. Simpson & Sons		3 69	
University Press, printing and stationery		211 50	
Superintendent's Dept., material		85	
Advertising Correspondence Work and Summer Session, 1920:			
"The School"		100 10	
"The Rebel"		15 00	
Evening Telegram		4 07	
Globe Printing Co.		6 10	
Mail and Empire		6 10	
Toronto Star Weekly		10 00	
Toronto World		7 50	
		$8.918 61	
Less sale of bulletins	$16 00		
Cancelled cheque	4 55	20 55	
			$8,898 06

91. *Social Service Building and Department.*

(*a*) Maintenance of Building:			
Fuel ($399.36):			
W. H. Cox Coal Co.		$125 13	
Britnell & Co.		17 88	
Wm. McGill Coal Co.		217 20	
Connell Anthracite Mining Co.		39 15	
Light $17.40):			
Consumers' Gas Co., gas		17 40	
Water ($21.98):			
City Treasurer		21 98	
Caretaker's supplies ($33.60):			
Superintendent's Dept., labour, 53c; material, $33.07..		33 60	
Cleaning ($666.50):			
Canadian Cleaning Co., cleaning windows		6 50	
Superintendent's Dept., labour		660 00	
Repairs and renewals ($378.30):			
Art Metropole, draughting materials		6 88	
A. Matthews, Ltd., repairs to roof		25 62	
G. R. Workman, draughting plans		15 00	
Superintendent's Dept., labour, $222.00; material, $108.80		330 80	
		$1,517 14	
Less sundry credits, cleaning		38 50	
		$1,478 64	
(*b*) Maintenance of Department:			
Honoraria to Acting Director and Lecturers ($2,900.00):			
Prof. R. M. MacIver, Acting Director		$500 00	
Miss K. Russell		400 00	
Dr. H. L. Brittain		200 00	
Miss L. Brooking		200 00	
N. Burnette		200 00	

91. *Social Service Building and Department.*—Continued.

E. Clark	$200 00	
Miss H. Hodgkins	200 00	
W. A. Riddell	200 00	
F. N. Stapleford	200 00	
Miss M. K. Strong	200 00	
Miss Mary Yates	200 00	
Miss A. McGregor	150 00	
Miss V. Parsons	50 00	
Special Lecturers ($478.07):		
J. Collier	112 64	
Dr. E. T. Devine	104 27	
J. A. Fitch	107 77	
Prof. J. Ford	111 08	
Miss E. Thompson	42 31	
Secretariat ($1,250.00):		
Miss A. C. McGregor, 12 months to 30th June	1,250 00	
Clerical assistance at $18 per week ($734.50):		
Miss K. Anderson	712 00	
Miss A. Watts	18 00	
Miss MacDonald	4 50	
Office supplies, printing, postage and incidentals ($624.12):		
The Bursar, postage supplied	137 00	
Macey Office Equipment Co., cabinet	13 95	
Prof. R. M. MacIver, disbursements:		
Telegrams, $5.16; stationery, $4.70; advertising and subscriptions to periodicals, $3.63; sundries, $6.47	19 96	
Telfer Mfg. Co., cases	59 40	
United Typewriter Co., inspections, etc.	8 55	
University Press, stationery and printing	260 95	
Petty items (5)	7 25	
Advertising *re* lectures:		
Evening Telegram	11 08	
Globe Printing Co.	9 86	
Mail and Empire	9 84	
Social Service Council of Canada	8 00	
Toronto Daily Star	15 82	
Toronto World	8 46	
Superintendent's Dept., labour, $31.11; material, $22.89	54 00	
Special Employment Management Course ($588.87):		
Prof. J. J. Coss	301 21	
Prof. Strong	287 66	
Special Extension Course, Mental Hygiene ($166.00):		
Dr. E. A. Bott	20 00	
Miss A. C. McGregor	16 00	
Prof. W. G. Smith	100 00	
H. Wasteneys	30 00	
		$8,220 20
		$17,118 26

X. Residences and Dining Hall.

92. *Men's Residences.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($104.73):		
Britnell & Co., fuel	$10 50	
Connell Anthracite Mining Co., fuel	94 23	
Water ($277.83):		
City Treasurer	277 83	
Caretaker's supplies ($498.90):		
Superintendent's Dept., labour, $3.22; material, $495.68	498 90	
Cleaning and house service ($5,095.25):		
Puritan Laundry Co., laundry	779 43	
Superintendent's Dept., labour	4,315 82	

92. *Men's Residences.*—Continued.

Repairs and renewals ($1,389.95):		
D. B. I. Card, exterminating rats	$7 50	
A. Matthews, Ltd., repairs to pipes	10 69	
Routery Bros., lathing and plastering	23 95	
University Press, cases	2 40	
Superintendent's Dept., labour, $550.54; material, $794.87	1,345 41	
	$7,366 66	
Less sundry credits (repairs)	173 25	
		$7,193 41

93. *Women's Residences.*

(1) Queen's Hall Group:		
(*a*) Maintenance of Building:		
Fuel ($3,521.29):		
Britnell & Co., fuel, $157.50; teaming, $171.93	$329 43	
Connell Anthracite Mining Co.	239 58	
W. H. Cox Coal Co.	2,460 13	
Dunlop Coal Co.	492 15	
Light ($523.80):		
Consumers' Gas Co.	309 71	
Toronto Electric Light Co.	214 09	
Water ($189.00):		
City Treasurer	189 00	
Repairs and renewals ($2,252.58):		
Art Metropole, draughting materials	5 00	
Wm. Bartlett & Son, shades	65 62	
A. Matthews, Ltd., repairs to gutters	65 38	
Routery Bros., lathing and plastering	30 89	
G. R. Workman, draughting plans	15 00	
Superintendent's Dept., labour, $1,130.13; material, $940.56	2,070 69	
	$6,486 67	
(*b*) Housekeeping Account:		
Provisions and housekeeping expenses ($13,176.23):		
Armstrong & Paffard, groceries	$1,468 68	
H. A. Ball, barrel	16 00	
Canada Bread Co., bread	638 37	
Christie Brown Co., biscuits	34 69	
City Dairy, ice cream	149 59	
Geo. Coles, Ltd., cake, pastry, etc.	355 35	
Wm. Dawson & Son, subscriptions	7 80	
T. Eaton Co., groceries, etc.	239 35	
H. P. Eckardt Co., groceries	16 61	
Evening Telegram, advertising for maids	14 72	
Farmer's Dairy Co., milk	1,032 16	
The Globe, subscription	10 00	
Gourlay, Winter & Leeming, hire of pianos	129 00	
Harris Abattoir Co., provisions	4,312 30	
H. J. Heinz Co., pickles	42 75	
Lyman Bros., & Co., drugs	6 24	
Lake Simcoe Ice Supply Co., ice	180 70	
Geo. Lister, provisions	1,625 71	
Little Grey Flower Shop, ferns	15 50	
Miss L. Livingstone, disbursements:		
Postage and car fare, $40.56; utensils, etc., $17.84; sharpening knives, etc., $10.65; telegrams and telephone calls, $4.25; food supplies, $2.24; sundries, $29.44	104 98	
Maple Leaf Milling Co., flour	81 90	
Medland Bros., groceries	306 49	
F. Simpson & Sons, provisions	437 97	
Robt. Simpson & Co., groceries, etc.	41 64	
John Sloan & Co., provisions	623 52	

93. *Women's Residences.*—Continued.

Todhunter, Mitchell & Co., coffee	$243 15	
Union Fruit & Produce Co., provisions	8 50	
Universal Sales Co., cleanser	15 00	
Whyte Packing Co., provisions	895 88	
University Press, printing and stationery	34 50	
Superintendent's Dept., material	75 71	
Petty items (5)	11 17	
Cleaning and House Service ($6,734.55):		
Allen Mfg. Co., laundry	462 65	
Baillie's Laundry, laundry	392 10	
John Bull Mfg. Co., cleaning	12 00	
Canadian Cleaning Co., cleaning windows	44 00	
A. H. Harraden, cleaning rugs	7 00	
Harron's Dye Works, cleaning pillows, etc.	18 00	
A. James, cleaning cushion covers, etc.	29 25	
W. Younger, cleaning chairs	15 00	
Pay lists, wages of servants, maids, etc.	5,754 55	
Furnishings, dishes, cutlery, etc. ($748.97):		
Adams Furniture Co., rockers	7 00	
T. Eaton Co., dishes, curtains, etc.	579 02	
Gurney Foundry Co., tubing and hot plate	3 25	
J. W. Knott & Son, decorating	64 20	
Robt. Simpson Co., aprons	54 00	
Geo. Sparrow & Co., pots, etc.	33 50	
Albert Whale, upholstering	4 00	
Chas. D. Winn, repairs to linoleum	4 00	
	$27,146 42	
Less sundry credits, occasional meals, etc.	308 34	
	$26,838 08	
Superintendent, Miss L. I. Livingstone, 12 mos. to 30 June	1,550 00	
Housekeeper, Miss L. Panton, 12 months to 30 June	1,050 00	
		$29,438 08

(2) 92 and 94 St. George St.:

(*a*) Maintenance of Building:

Fuel ($976.37):		
Britnell & Co.	$57 68	
Connell Anthracite Mining Co.	396 29	
W. H. Cox Coal Co.	92 00	
Dunlop Coal Co.	155 00	
Wm. McGill Coal Co.	275 40	
Light ($79.34):		
Consumers' Gas Co.	25 90	
Toronto Hydro-Electric	53 44	
Water ($16.87):		
City Treasurer	16 87	
Repairs and renewals ($135.06):		
Bell Telephone Co., moving telephones	6 00	
Superintendent's Dept., labour, $65.50; material, $63.56	129 06	

(*b*) Housekeeping Account ($1,239.82):

Cleaning and House Service:		
A. O. Connor, waxing floor	2 25	
T. Eaton Co., supplies	90 45	
Wm. Harding, rugs	8 70	
Industrial Refuge, laundry	129 69	
Toronto Window Cleaning Co.	3 76	
University Press, stationery	7 95	
Superintendent's Dept., material	5 26	
Pay lists, wages of cleaners	991 76	
		$2,447 46
		$31,885 54

94. *Dining Hall.*

Secretary-Treasurer, Hart House, grant by Board of Governors to cover sundry renewals of equipment upon transfer of Dining Hall to Hart House	$4,179 23

95. *University College Women's Union.*

(*a*) Maintenance of Building:		
Fuel ($696.54):		
Britnell & Co.	$73 45	
Connell Anthracite Mining Co.	248 45	
W. H. Cox Coal Co.	266 14	
Dunlop Coal Co.	108 50	
Gas and city current ($549.23):		
Consumers' Gas Co.	549 23	
Water ($37.02):		
City Treasurer	37 02	
Repairs and renewals ($694.87):		
Wm. Bartlett & Son, shades	7 66	
A. Matthews, Ltd., repairs to roof	32 48	
Superintendent's Dept., labour, $459.44; material, $195.29	654 73	
		$1,977 66
(*b*) Housekeeping Account:		
Provisions and housekeeping expenses ($11,629.38):		
P. Andrews, cake, pastry, etc.	$218 53	
F. Andrews, confectionery	21 72	
Jas. Bamford, provisions	97 80	
Belle Ewart Ice Co., ice	40 40	
J. Blood, groceries	330 19	
Bowes Co., honey	51 00	
Campbell Flour Mills Co., cereals	166 30	
J. B. Ciceri Co., fruit	151 73	
Club Coffee Co., coffee	181 65	
Geo. Coles, Ltd., pastry	21 79	
T. Eaton Co., supplies	5 43	
Eby Blain, Ltd., groceries	28 63	
E. B. Eddy Co., serviettes, etc.	56 30	
Evening Telegram, advertising for maids	11 14	
Farmer's Dairy Co., milk	1,444 02	
Glassco, Ltd., jams	226 23	
Gordon Mackay Co., cotton	20 98	
Grand & Toy, stationery	14 80	
Gunn's, Ltd., meat	10 64	
Harris Abattoir Co., meat	3,963 08	
H. J. Heinz Co., pickles	45 63	
W. S. Johnson & Co., printing	26 50	
Geo. Lister, provisions	44 82	
Mediterranean Products Co., groceries	22 50	
Mrs. E. Nieghorn, butter	10 20	
Wm. Neilson, Ltd., ice cream	310 21	
Wm. Patterson & Sons, provisions	1,327 58	
W. H. Proctor & Co., catsup	25 95	
F. Simpson & Sons, groceries	244 40	
Union Petroleum Co., soap	30 30	
Warren Bros. & Co., groceries	1,636 52	
Harry Webb Co., bread	694 37	
Miss M. C. Wrong, disbursements: Food supplies, $44.52; utensils, etc., $21.07; sundries, $12.33	77 92	
Petty items (5)	9 06	
Freight charges	3 60	
Superintendent's Dept., material	57 46	
Cleaning and House Service ($3,237.26):		
Canadian Cleaning Co., cleaning windows	18 37	

95. *University College Women's Union.*—Continued.

Industrial Refuge, laundry	$305 73	
H. O'Connor, waxing floor	5 00	
Toronto Window Cleaning Co.	15 98	
Pay lists, wages of servants, maids, etc.	2,892 18	
Magazines, piano, etc. ($386.62):		
Heintzman & Co., piano, $300.00; tuning and rental, $30.50	330 50	
MacDonald Subscription Agency, magazines	22 20	
W. H. Smith & Son, magazines	33 92	
Furnishings, dishes and sundries ($807.64):		
Canada Furniture Mfg. Co., chairs	140 00	
Canadian Wm. A. Rogers Co., utensils	129 95	
T. Eaton Co., furnishings	268 04	
Gordon Mackay & Co., cretonne	59 50	
Gowans Kent & Co., spoons, etc.	88 10	
Geo. E. Grove, repairs to locks	11 50	
Gurney Foundry Co., utensils	8 54	
W. S. Johnston & Co., printing meal tickets	14 50	
Wm. Junor, dishes	27 80	
C. W. Mack, date stamp	2 60	
Miss E. Robertson, sheets and towels	12 54	
G. H. Robinson, webbing sofa	3 50	
Wrought Iron Range Co., utensils	22 48	
Petty items (3)	4 34	
Superintendent's Dept., material	14 25	
	$16,060 90	
Less paid by students on account of magazines	17 00	
	$16,043 90	
Resident Head, Miss M. C. Wrong, 12 mos. to 30 June	1,550 00	
Housekeeper, Miss J. Barber, 12 mos. to 30 June	1,000 00	
	$18,593 90	
		$20,571 56
		$63,829 74

XI. (96) Royal Ontario Museum.

University's share of maintenance advanced to the Trustees of the Royal Ontario Museum, under 2 Geo. V, Cap. 80	$22,473 49

XII. (97) Central Power Plant.

Fuel ($65,747.20):		
Britnell & Co., fuel, $3,830.28; teaming, $5,971.82; storage, $12.01	$9,814 11	
Century Coal Co., fuel	750 65	
Conger Lehigh Coal Co., fuel	575 36	
W. H. Cox Coal Co., fuel, $42,419.74; teaming, $9.93	42,429 67	
Doan & Charles, teaming (account of 1918)	75 56	
Dunlop Coal Co., fuel	4,939 41	
Wm. McGill & Co., fuel	5,322 98	
Milnes Coal Co., Ltd., fuel	781 59	
Ridout & Bethune, teaming	84 45	
L. Joslyn Rogers, analyzing samples	50 00	
Superintendent's Dept., labour, $894.75; material, $28.67	923 42	
City Electric Current ($2,608.63):		
Toronto Electric Light Co.	2,608 63	
Water ($297.86):		
City Treasurer	297 86	
Repairs and renewals, engineers' supplies and miscellaneous items ($4,954.61):		
Graham Campbell, Superintendent, sundry disbursements	8 00	

XII. (97) *Central Power Plant.*—Continued.

Canadian Cleaning Co., cleaning windows	$2 50	
T. A. Crow, repairs, etc.	22 65	
Culverhouse Optical Co., lens	1 00	
R. Robertson & Sons, repairs to boiler, etc.	567 14	
John Rydall, repairing tools	15 00	
Turnbull Elevator Mfg. Co., cables and installation	73 85	
Superintendent's Dept., labour, $1,620.44; material, $2,585.73	4,206 17	
Sundry advertisements *re* fuel tenders, etc.:		
Evening Telegram	10 50	
Mail and Empire	10 50	
The Globe	10 50	
Toronto Daily Star	10 50	
University Press	16 30	
Engineers, assistant engineers, firemen and trimmers ($11,072.65):		
Chief engineer, Chas. Moseley, 1 July to 31 October (resigned), at $2,000.00	733 33	
Chief engineer, Chas. Moseley, Jr., 16 September to 30 June at $1,600	1,266 71	
Assistant engineers at $100.00 per month:		
Wm. Smith, 12 months to 30 June, $1,200.00; overtime, 24 hours, $10.00	1,210 00	
L. McMaster, 11 months, 22 days, $1,173.33; overtime, 10 hours, $4.17	1,177 50	
J. Sandie, 11 months, 26 days	1,186 67	
Firemen at $90.00 per month:		
M. Andrews, 7 months, 13 days, $663.00; overtime, 106 hours, $39.75	702 75	
T. Foulkes, 1 month, 23 days, $159.00; overtime, 4 hours, $1.50	160 50	
W. Garbutt, 1 month, 2 days	96 00	
Wm. McDonald, 12 months to 30 June, $1,080.00; overtime, 60 hours, $22.50	1,102 50	
T. O'Connor, 7 months, 6½ days, $649.50; overtime, 77 hours, $28.88	678 38	
W. Odd, 5 months, 27 days, $531.00; overtime, 32 hours, $12.00	543 00	
G. Powles, 14 days	42 00	
C. Sheard, 3 months, 28 days, $354.00; overtime, 39 hours, $14.63	368 63	
Trimmers and helpers:		
Sundry labour at $80.00 per month	1,804 68	
		$84,680 95

XIII. (98) Contingencies and Miscellaneous.

University Alumni Association, grant for work done by them on records of graduates and turned over to University	$5,000 00	
Hart House Opening ($1,495.34):		
Secretary-Treasurer, Hart House, entertainment of guests	1,463 25	
Might Directories, addressing envelopes	31 09	
M. Rawlinson, cartage	1 00	
Chester Massey Portrait ($500.00):		
F. H. Varley, on account of fee ($1,500.00), for portrait	500 00	
Ramsay Wright Portrait ($1,616.86):		
Arnesby Brown, fee and cost of shipping portrait	1,565 00	
McKenzie & Co., hanging portrait	6 95	
Sir Edmund Walker, sundry expenses	44 91	
Daniel Wilson Sketches ($75.00):		
J. G. Sime, water colours purchased	75 00	
McKenzie & Co., framing portrait of Sir Wm. Osler	44 55	
Armorial Bearings ($165.54):		
J. & E. Bumpus, photographs and paintings	143 54	
McKenzie & Co., framing	22 00	
Miss E. E. Shaw, engrossing resolution	10 00	
Sir Edmund Walker, Chairman's disbursements for postage, etc.	7 35	

XIII. (98) *Contingencies.*—Continued.

O'Keefe Brewery Co., spring water for Board meetings	$4 64	
Sundry Valuations ($350.00):		
H. H. Williams	250 00	
National Trust Co.	100 00	
Taxes ($270.67):		
City Treasurer, adjustments for 1920 on the following properties:		
100 Queen's Park	180 52	
1 Queen's Park	47 34	
2 Surrey Place	15 54	
92 St. George Street	12 27	
94 St. George Street	15 00	
Equipment of Superintendent's Shops ($742.94):		
Superintendent's Dept., material	742 94	
George Fowler, injured painter, wages while incapacitated from work	127 88	
Freight charges on effects to widow of late Prof. G. S. Stevenson	218 34	
Freight charges on effects to widow of late Prof. Ledoux	15 98	
Association of Urban Universities, annual dues	10 80	
Society for promotion of Engineering Education, annual dues.	10 41	
Sundry persons, refunds on old Dining Hall tickets unused	29 01	
Sundry persons, occasional attendance	4 00	
		$10,699 31

XIV. (99) Capital Account Charges.

Accountant, Supreme Court of Ontario, eleventh annual payment on debenture issue of 1909	$25,260 00	
Accountant, Supreme Court of Ontario, fifth annual payment on debenture issue of 1915 *re* Hart House	5,975 00	
Toronto General Hospital, ninth annual payment on debenture issue of 1911, *re* Pathological Building	6,568 00	
Toronto General Hospital, ninth annual payment on debenture issue of 1911, *re* grant to Toronto General Hospital	15,157 00	
Wardrop Estate, fifth instalment on purchase of house No. 8 Queen's Park	750 00	
Shoenberger Estate, fourth instalment on purchase of house No. 184 College St.	500 00	
Campbell Estate, second instalment on purchase of 100 Queen's Park	720 00	
Purchase of Beatty leasehold, City Treasurer, taxes, 1920	461 54	
Repayment to Endowment on account of advance for construction of Central Power House, tunnels and equipment	20,208 00	
		$75,599 54

XV. (100) Special Research.

Applied Science.

Price-Rosebrugh Research:		
Research Assistants:		
C. K. Duff, 12 mos. to 30 June	$1,300 00	
Cameron Duncan, 2 mos., 5 days, at $100.00 per month	216 66	
W. A. Steel, 7½ mos. to 30 April at $1,400.00 per annum	875 00	
Mechanician, J. W. Lawson, 10 mos., 15 days, at $700.00 per annum (paid also in Dept. of Electrical Engineering)	612 50	
Expenses ($780.57):		
Aikenhead Hardware Co., hardware	9 61	
Canada Wire and Cable Co., wire	20 64	
Canadian General Electric Co., lamps	23 52	
Canadian National Carbon Co., batteries	15 60	
Canadian Westinghouse Co., steel	94 34	
De Forest Radio Co., oscillian tubes	327 00	

XV. (100) *Special Research.*—Continued.

Lyman Bros., chemicals	$7 00
Ontario Trading Co., tent	55 00
Photography, Dept. of, slides	14 25
Societe Anonyme, rods	52 85
Vimy Supply Co., condenser	14 90
Webster Electrical Instrument Co., repairs	7 43
Petty items (3)	7 27
Freight Charges	4 95
Superintendent's Dept., labour, $80.55; material, $45.66	126 21
Boswell Research:	
Research Assistant, H. J. Brownlee, 1 January to 10 June at $200.00 per month	$1,066 66
Expenses ($12.32):	
J. A. Bryan, pan	6 30
J. E. Leworthy, tubes	2 25
McKay School Equipment Co., hydroxide	3 77
Angus Research:	
Research Assistant, H. A. Tuttle, 6 mos., 13 days at $143.00 per month	919 97
Demonstrators:	
J. A. Tilson, 1½ mos. at $150.00	225 00
J. H. Parkin, 2 mos. at $250.00	500 00
H. C. Crane, 1 month at $100.00	100 00
Expenses ($1,258.31):	
American Propeller Mfg. Co., propeller	105 29
Atlas Engine & Machine Co., gauges	304 00
Bausch & Lomb Optical Co., microscopemeter	32 86
Canadian Johns Manville Co., tactometer	60 00
Canadian Westinghouse Co., rheostats	152 60
J. B. Edmunds & Co., cup	4 17
Lyman Bros., chemicals	11 72
McKay School Equipment Co., tubing	2 45
Students' Book Dept., book	9 00
C. H. Taylor, models	299 60
Toronto Pattern Works, pattern	8 89
Petty items (3)	5 43
University Press, printing	2 90
Superintendent's Dept., labour, $174.87; material $84.53	259 40
Haultain Research:	
Research Assistant, R. C. Potter, 1 month at $75.00, $75.00; 1 November to 19 June at $100.00 per month, $763.33	838 33
Expenses ($1,072.52):	
Aikenhead Hardware Co., hardware	6 60
Albany Pump Co., pulley, etc.	95 95
Applied Chemistry Dept., glass-blowing	18 00
Baines & Peckover, steel	36 04
J. T. Baker Chemical Co., chemicals	3 26
Canadian Carbonate Co., gas	4 50
Connersville Blower Co., valve	4 76
Denver Fire Clay Co., balance, etc.	321 42
Dodge Mfg. Co., pulley	9 39
F. C. Dyer, disbursements, Laboratory supplies	15 53
T. Eaton Co., lens, etc.	9 70
L'Air Liquide Society, oxygen	3 50
Lyman Bros., chemicals	3 40
A. Matthews, Ltd., supplies	25 20
McKay School Equipment Co., supplies	16 64
W. R. McKee, repairs and electrical supplies	138 78
Norton Co., thimbles	4 55
Pilkington Bros., glass	9 25
Photography, Dept. of, prints	11 40
J. G. Ramsey & Co., film packs, etc.	20 95
Singer Sewing Machine Co., motor	18 00

XV. (100) *Special Research.*—Continued.

Superior Mfg. Co., card holders	$25 55	
A. H. Thomas Co., asbestos	5 58	
Toronto Auto Wrecking Co., speedometer	10 00	
Toronto Welding Co., welding	3 25	
Will Corporation, tubes, etc.	30 59	
Petty items (7)	12 02	
Freight Charges	7 12	
Superintendent's Dept., labour, $52.27; material $149.32	201 59	
Arkley Research:		
Expenses ($257.04):		
Prof. Arkley, petty disbursements	2 97	
Lyman Bros., chemicals	11 57	
McKay School Equipment Co., pipettes	11 70	
Elias Rogers Coal Co., fuel	49 50	
E. M. Tozer, coal dumper	2 50	
Superintendent's Dept., labour, $101.05; material, $77.75.	178 80	
Gillespie-McGowan Research:		
Expenses ($265.40):		
Prof. Gillespie, advance for travelling expenses, for research expedition	250 00	
C. R. Young, draughting	15 40	
Guess Research:		
Expenses ($23.44):		
Northern Aluminum Co., aluminum	6 99	
W. K. Simpson, labour on pumps	5 95	
W. W. Wells, salt	10 50	
General Expenses ($611.92):		
The Bursar, postage supplied	45 00	
Freight Charges	9 12	
University Press, printing	557 80	
		$10,935 64

Medicine.

Laboratory Attendants:		
W. Cowan, 8 December to 30 June, at $900.00 per annum.	$508 07	
Geo. Medhurst, 1 July to 30 November, at $800.00 per annum	333 34	
Technician, Leonard Heddick, 6 October to 30 June, at $50.00 per month	441 67	
Apparatus and supplies ($632.16):		
Allen Mfg. Co., laundry	6 35	
Miss E. Gordon, cleaning instruments	5 00	
Hudson-Parker, towels, etc.	20 70	
Ingram & Bell, surgical instruments, chemicals	315 08	
Toronto General Hospital, repairs to Metabolism equipment	60 00	
Dr. A. Primrose, disbursements:		
Laboratory supplies, $48.54; animals, $9.40; postage, and sundries, $6.25—$64.19; less charged in 1920-21, $7.86	56 33	
Superintendent's Dept., labour, $152.53; material, $16.17..	168 70	
Animals, animal feed, etc. ($359.70):		
J. O'Donnell, dogs, $42.20; care of dogs, $277.25	319 45	
D. E. Robertson, animals	24 25	
Toronto Dog & Cat Hospital, animals	16 00	
Psychiatry:		
Keeping records of experimental work:		
Miss M. Le Drew, 10 mos. to 30 April	500 00	
		$2,774 94

Anatomy.

Expenses ($391.83):		
Ingram & Bell, slides	$11 32	
Spencer Lens Co., microscope, etc.	366 66	
University Press, printing	2 60	
Superintendent's Dept., material	11 25	
		$391 83

XV. (100) *Special Research.*—Continued.

Bio-Chemistry.

Expenses ($750.86):		
International Equipment Co., laboratory equipment	$477 72	
Keuffel & Esser Co., scales, etc.	23 27	
J. M. Paquin, motor	40 00	
Will Corporation, flasks, burettes, motor, etc.	209 87	
		$750 86

Biology.

Expenses ($285.89):		
M. E. Carson, laboratory material	$10 98	
T. Eaton Co., rubber coats	4 90	
Hynson, Westcott & Dunning, calorimeters	11 66	
Lyman Bros. & Co., chemicals	19 76	
McKay School Equipment Co., balances	99 00	
Ontario Rubber Co., tubing	3 40	
Scientific Materials Co., test tubes	2 39	
Walker House Aquarium, water weeds	2 50	
Will Corporation, burettes, thermometers	131 30	
		$285 89

Botany.

Research Lecturer, H. B. Sifton, 6 mos. to 30 June	$1,200 00	
Research Assistants:		
Miss M. E. Currie, 6 mos. to 30 June	600 00	
Miss C. W. Fritz, 3 mos. to 30 June	300 00	
Clerical Assistance:		
Miss R. Dinsmore, 58 hrs. at 60c, $34.80; 5 weeks at $20.00, $100.00	$134 80	
Miss F. McGugan, 2 weeks at $14.40, $28.80; 4 weeks at $21.15, $84.60; 2 weeks, 2 days, at $60.00 per month, $53.40	166 80	
Expenses ($1,046.01):		
E. Criddle, seeds	14 25	
J. F. Hartz Co., incubator, oven, etc.	194 39	
Ingram & Bell, tubes, etc.	59 79	
Office Specialty Mfg. Co., section guides	29 00	
Photography, Dept. of, plates, etc.	36 95	
Spencer Lens Co., microscopes, incubator, etc.	681 03	
University Press, stationery	6 75	
Superintendent's Dept., labour, $18.85; material, $5.00	23 85	
		$3,447 61

Chemistry.

Salaries:		
Prof. F. B. Allan, Prof. F. B. Kenrick (share of salary charged to Research —see Faculty of Arts)	$2,000 00	
Expenses ($3,789.64):		
Falls Equipment Co., voltmeter	514 53	
Leeds & Northrup Co., indicator	165 12	
Packard Electric Co., transformers	2,130 65	
Volta Mfg. Co., motor, etc	873 00	
Will Corporation, tubes, etc.	104 89	
Freight Charges	1 45	
		$5,789 64

Geology.

Prof. A. P. Coleman, advance for travelling expenses for research expedition	$800 00	
Expenses:		
Universal Car Co., Ford car and accessories	1,073 41	
		$1,873 41

XV. (100) *Special Research.*—Continued.

Palæontology.

Prof. W. A. Parks, expenditure upon Red Deer River expedition: Wages paid assistants, $968.85; hotel and travelling expenses, $737.50; provisions, $492.99; supplies and equipment, $358.35; freight charges, $274.97; team and sundries, $167.34	$3,000 00	
		$3,000 00

Mineralogy.

Research Assistant, T. L. Gledhill, 8 mos. at $125.00	$1,000 00	
Expenses ($1,482.01):		
Bausch & Lomb Optical Co., metallographic outfit, etc.	658 88	
Canadian Laboratories, supplies, chemicals	17 34	
W. F. Green, analyzing minerals	400 00	
Ludwig Hommell & Co., illuminator	131 26	
A. J. Klack, analyzing minerals	200 00	
Chas. Potter, oxygen	2 50	
J. G. Ramsey & Co., lamp, etc.	5 44	
Spencer Lens Co., lamps	13 70	
Ward's Natural Science Establishment, minerals	23 33	
Will Corporation, tubing, etc.	29 56	
		$2,482 01

Physics.

Research Assistants:		
T. S. Plaskett, addition to salary as mechanician, Faculty of Arts	$200 00	
E. J. Wood, 3 mos. at $225.00	675 00	
Supplies and apparatus ($14,326.04):		
Aikenhead Hardware, Ltd., hardware	143 23	
Armstrong Bros., crank shaft	3 75	
Art Metropole, stationery	8 97	
Baines & David, steel	26 97	
Beardmore Belting Co., belting	240 97	
Buehler & Co., chemicals	30 22	
Cambridge & Paul Instrument Co., thermometer, cylinders, etc.	175 73	
Canada Metal Co., bronze castings, etc.	103 12	
Canadian Electric Supply Co., switches	6 84	
Canadian General Electric Supply Co., motor, etc.	99 80	
Canadian Kodak Co., lens	4 05	
Central Electric Supply Co., cells	12 03	
Colville Cartage Co., cartage	50 25	
Corning Glass Works, glass	58 70	
Dempsey Bros., plumbing supplies	1 40	
Dodge Mfg. Co., pulley	7 10	
T. Eaton Co., rulers, felt, etc.	5 15	
Edison Swan Electric Co., mercury pumps	347 07	
Eimer & Amend, carbon, tubing, etc.	241 42	
Chas. Englehard, glass plates, etc.	138 76	
Garlock Packing Co., rings	19 31	
Chas. E. Goad, Engineering Co., jars	6 02	
Jas. R. Gregory & Co., plates	9 49	
Adam Hilger, Ltd., range finder, X-Ray plates, etc.	604 11	
Howard Rawson & Co., stop cocks	42 72	
Imperial Oil, Ltd., oil	4 88	
International General Electric Co., X-ray tubes	116 89	
Johnson, Matthey & Co., Ltd., platinum	135 43	
Kimble Glass Co., stop-cock plugs	28 41	
L'Air Liquide Society, liquid air plant, oxygen, etc.	5,951 38	
A. S. Leitch Co., compressor, etc.	2,971 40	
Lester Storage & Cartage Co., cartage	6 50	
Lever Bros., oxygen	6 06	
Lyman Bros. & Co., chemicals	23 81	
Machine & Stamping Co., shell	3 50	

XV. (100) *Special Research.*—Continued.

John Millen & Son, coils	$14 40	
Jas. Morrison Brass Mfg. Co., piping	19 88	
National Drug & Chemical Co., mercury	250 00	
Nicholls Chemical Co., chemicals	71 40	
Ontario Metal Products, brass rods, etc.	96 17	
Ontario Rubber Co., tubing, etc.	28 36	
H. W. Petrie, Ltd., pulley	7 00	
Richards Glass Co., tubes	3 50	
Rome Brass & Copper Co., tubing	62 85	
Taylor Instrument Co., galvanometer	77 62	
Thermal Syndicate, Ltd., tubing	319 96	
Watson & Son, disc	34 54	
John Whitfield, steel	10 68	
A. R. Williams Machinery Co., pulleys	31 29	
Freight Charges	59 01	
Superintendent's Dept., labour, $209.90; material, $1,394.04	1,603 94	
		$15,201 04

Physiology.

Research Assistants:		
Edward Fidlar, 6 mos. to 30 June	$500 00	
L. G. Kilborn, 2 mos. at $85.00, $170.00; 1 month at $100.00	270 00	
R. S. Lang, 2 mos. at $85.00	170 00	
S. V. Page, 1 month	75 00	
D. J. Prendergast, 8 mos.	266 66	
Mrs. E. S. Redfield, 1 month	41 67	
Expenses ($553.34):		
D. Armitage, tubes	4 00	
Canadian General Electric Co., motor, etc.	62 00	
Connaught Antitoxin Laboratories, Antitoxin Division, rabbits	6 25	
A. Double, cats	3 75	
Edison Swan Electric Co., lamps	26 30	
Ingram & Bell, tubing, etc.	19 51	
L'Air Liquide Society, oxygen	1 50	
Lyman Bros. & Co., chemicals	51 24	
Mallenckrodt Chemical Works, chemicals	10 95	
McKay School Equipment Co., chemicals	33 23	
A. B. Stevenson, mathematical calculations	45 00	
A. Storrs & Bement Co., paper	32 11	
A. H. Thomas Co., apparatus	34 16	
Toronto Dog & Cat Hospital, animals	134 00	
Will Corporation, burettes	47 63	
Superintendent's Dept., labour, 75c.; material, $40.96	41 71	
		$1,876 67

Zymology.

H. B. Speakman, Director, 12 mos. to 30 June	$3,600 00	
A. M. Wynne, Research Assistant, 12 mos. to 30 June	1,500 00	
A. E. Clarke, Laboratory Attendant, 12 mos. to 30 June	400 00	
Supplies and apparatus ($1,558.05):		
American Chemical Society, subscription	11 32	
Booth Coulter Copper Brass Co., repairs	16 60	
Central Scientific Co., electrode	6 90	
Chisholm Milling Co., corn meal	13 50	
J. F. Hartz Co., chemicals, etc.	964 19	
Hynson, Westcott & Dunning, calorimeter	15 83	
R. Jordan, plumbing	70 47	
Leeds & Northrup Co., galvanometer	20 29	
Lyman Bros. & Co., chemicals	10 98	
McKay School Equipment Co., mercury, etc.	43 02	
O'Keefe Brewery Co., malt	2 00	
Palo Co., contact tube	37 52	
Richards Glass Co., tubes, etc.	10 30	

XV. (100) *Special Research.*—Continued.

Rockefeller Institute for Medical Research, subscription..	$18 55	
Geo. Sparrow & Co., pot	5 00	
H. B. Speakman, disbursements:		
Laboratory supplies, $27.11; express and freight, $11.04; laundry, $9.33; postage, $6.00; sundries, $6.05	59 53	
Students' Book Dept., books	5 70	
A. H. Thomas Co., electrode, bulbs, etc.	123 79	
Toronto Hydro-Electric System, lamps	10 54	
United Typewriter Co., cabinet, etc.	88 95	
University of Chicago Press, subscription	11 66	
Williams & Wilkins Co., subscription	11 41	
Alterations ($2,499.99):		
Superintendent's Dept., labour, $647.31; material, $1,852.68	2,499 99	
		$9,558 04
		$58,367 58

XVI. (101) Special Courses for Returned Soldiers.

Preparatory Classes ($8,043.33):		
Instructors:		
Miss M. E. G. Waddell, 12 mos. to 30 June	$3,000 00	
F. Owen, 1 to 23 July at $175 per month, $135; 1 October to 30 June at $200 per month, $1,800	1,935 00	
J. D. Robins, 1 December to 30 June	750 00	
G. A. Cline, 1 October to 30 June (paid also in Education)	750 00	
H. A. Grainger, 1 October to 30 June (paid also in Education)	750 00	
W. D. Woodhead, 1 December to 30 June (paid also in Arts)	750 00	
H. G. Manning, 1 month at $216.66, of which half charged to Education	108 33	
Special Sessions:		
Arts (for work done in 1918-19, $1,300):		
B. Sadowski	500 00	
J. C. Robertson	160 00	
J. T. Muckle	140 00	
H. Carr	100 00	
G. Holt	100 00	
M. Hutton	100 00	
A. L. Langford	100 00	
J. D. Robins	100 00	
Medicine ($825):		
F. B. Allan	150 00	
W. A. Clemens	150 00	
W. H. Piersol	150 00	
J. C. Watt	75 00	
J. Gordon Gallie	50 00	
Andrew Hunter	50 00	
R. S. Lang	50 00	
J. J. Mackenzie	50 00	
H. A. McTaggart	50 00	
G. E. Wilson	50 00	
Course for Khaki University Students ($700):		
J. Satterly	250 00	
W. H. Piersol	200 00	
W. H. T. Baillie	150 00	
A. F. Coventry	100 00	
		$10,868 33

APPENDIX IV.

University Press.

Transactions for year ending 30th June, 1920.

Receipts, 1919-20 (including $13,598.49, outstanding and receivable on 30th June, 1920)			$80,930 20
Expenditures, 1919-20 (detailed below)		$73,660 54	
Transferred to Publications Account		1,265 00	
		$72,395 54	
Value of supplies bought in advance and on hand, 30 June, 1920	$3,225 78		
And work in progress	846 20		
	$4,071 98		
Less liabilities	202 00	3,869 98	
			68,525 56
			$12,404 64
Purchase in advance (net) as above			3,869 98
			$8,534 66
Amount of Surplus account on 30 June, 1919		$16,084 98	
Added thereto, balance from operating account, 30 June, 1920, as above		8,534 66	
		$24,619 64	
Less expenditures on additions to type and equipment during 1919-20		8,347 35	
At credit of Surplus account, 30 June, 1920 (Schedule 4*b*)			$16,272 29
Publications Account:			
Amount outstanding 30 June, 1919		$227 89	
Expenditures		1,397 00	
		$1,624 89	
Receipts from sales		1,113 45	
Amount outstanding 30th June, 1920.			$511 44

Details of Expenditure, Operating Account.

R. J. Hamilton, Manager, 12 months to 30 June, $2,250; allowance for clerical assistance, $200	$2,450 00	
Pay lists, wages of employees	37,358 26	
		$39,808 26
Supplies and General Maintenance ($33,852.28):		
Alexander & Cable, lithographing	$75 00	
Allen Paper Co., paper	434 84	
Alex. Anderson, binding	591 62	
Anstey & Bromley, binding and ruling	421 34	
Art Metropole, supplies	154 52	
Ault & Wiborg, ink	6 75	
D. A. Balfour Co., ribbons	100 00	
Barber-Ellis, paper	1,806 58	
R. C. Bourne, leather	150 00	
Brigden's, Ltd., cuts	863 45	
W. R. Brock Co., linen	53 20	
Brown Bros., paper and supplies	2,592 13	
Buntin-Reid Co., paper	1,604 05	
The Bursar, postage supplied	128 50	

University Press.—Continued.

Chas. Bush, Ltd., ink	$402 28
Canada Carbon & Ribbon Co., paper	6 00
Canada Paper Co., paper	146 69
Canada Printing Ink Co., ink	54 63
Cannon Canadian Co., paste	35 39
E. Carroll, grinding knives	16 30
Climax Baler, wire	6 00
Copp, Clark Co., examination books, etc.	516 85
Croft & Wright, printing	48 00
J. Dickinson, Co., paper	4,221 23
Dominion Envelope & Carton Co., envelopes	774 02
Dominion Paper Box Co., boxes	22 75
John Elliott, embossing	292 35
Evening Telegram, advertising for help	6 61
Geo. Everall Co., printing	27 00
W. J. Gage & Co., envelopes and supplies	490 67
Gill Bros., ruling	583 50
Grand & Toy, stationery	301 97
R. J. Hamilton, disbursements:	
Cleaning, etc., $26.88; postage and car fares, $20.25; express and freight, $17.60; laundry, $5.24; supplies and sundries, $49.32	119 29
Henderson Bros., binding	788 55
G. M. Hendry Co., ink-wells	9 00
Imperial Oil, Ltd., oil	34 40
Lanston Monotype Machine Co., repairs	402 83
Littlejohn & Vaughan, electrotypes	36 16
H. J. Logan, wire	6 40
Lowe-Martin Co., cards	16 94
Luckett Loose Leaf Co., paper	22 85
Lyon & James, Ltd., covers and folders	21 12
Manton Bros., ink	24 95
Geo. A. Matthews, repairs to motor	13 80
Thos. McDonnell, binding	104 17
Miller & Richard, printing	27 75
J. L. Morrison Co., wire	45 90
A. Muirhead Co., gold leaf	31 64
National Paper Goods Co., paper	5 46
National Typewriter Co., paper and ribbons	224 21
Office Specialty Co., folders	5 45
Paper Sales Co., paper	444 24
Patterson & Heward, brass stamp	11 50
Pearce Envelope Co., envelopes	10 80
Poole & Co., repairs to press	38 05
Provincial Paper Mills, paper	7,204 25
Rapid Typesetting Co., typesetting	961 65
Ryerson Press, electrotyping	94 70
Silks, Ltd., ribbon	30 50
Sinclair, Valentine & Hoops, ink	72 87
Dr. W. Harley Smith, vaccinating staff	18 00
Southam Press, printing	17 50
Standard Embossing Co., embossing	305 91
Students' Book Dept., supplies	243 53
Telfer Mfg. Co., cardboard	124 80
Thomas & Martin, binding	151 04
Toronto Delivery & Cartage Co., cartage	167 35
Toronto Type Foundry, type	456 20
United Paper Mills, paper	1,744 90
United Typewriter Co., stationery	45 21
Weatherhead Paper Co., paper	181 09
Westman & Baker, repairs	12 15
Whaley, Royce Co., examination papers	7 50
A. White Paper Co., paper	254 80
Wickett & Smith, gold leaf	13 00
Wilson-Munroe Co., paper	1,070 43
Items under $5.00 (12)	30 25
Freight charges	31 99

University Press.—Continued.

Superintendent's Dept., labour, $245.96; material, $193.60..	$439 56	
Heat, light and power charges under report adopted by Board:		
Heat, $92.50; electric current, $300.00; gas, $162.86...	555 36	
Advertising Announcements:		
Public Health Journal	25 00	
St. Andrew's College Review	15 00	
The School	60 06	
Torontonensis, 1920	15 00	
University Y.M.C.A.	18 00	
U.T.S. Magazine	65 00	
The Varsity	40 00	
		$33,852 28
		$73,660 54

Details of Expenditure, Plant Account.

Canada Metal Co., metal	$714 06	
Lanston Monotype Machine Co., machine	1,968 18	
R. B. Smiley, transveyor	149 80	
Toronto Type Foundry Co., printing press, etc.	5,515 31	
		$8,347 35

APPENDIX V.

Connaught Antitoxin Laboratories.

Transactions for Year Ending 30th June, 1920.

(1) *Antitoxin Division.*

Receipts during 1919-20	$101,060 55	
Accounts Receivable on 30th June, 1920	7,886 40	
		$108,946 95
Expenditures during 1919-20 (detailed below)	$61,922 02	
Amount transferred to Research Division, No. 3	29,574 87	
		$91,496 89
Balance transferred to Surplus Account		$17,450 06

Details of Expenditure, Operating Account.

Salaries, wages and occasional assistance ($24,705.09):	
Dr. J. G. Fitzgerald, Director, 6 mos. at $4,000.00; 6 mos. at $2,500.00, to June (paid also in Hygiene)	$3,250 00
Dr. R. D. Defries, Associate Director, 12 mos. to 30th June (paid also in Hygiene)	3,000 00
P. J. Moloney, Chemist, 15th November to 30th June, at $87.50 per month	656 25
Office and Laboratory Staff ($10,061.47):	
Wm. Knowles, 6 mos. at $83.33; 6 mos. at $133.33; overtime, $71.37	1,371 33
Miss L. Hanna, 12 mos. to 30th June, $1,200; overtime, $35.89	1,235 89
Miss H. Finnegan, 12 mos. to 30th June, $900; overtime, $66.52	966 52
Miss E. Graham, 6 mos. at $65.00; 6 mos. at $75.00; overtime, $66.86	916 86
Miss E. Slute, 4½ mos. at $55.00; 7½ mos. at $60.00; overtime, $36.92	734 42
R. Chapman, 10 mos. at $65.00 to April 30th; overtime, $28.37	678 37
Mrs. Gratton, 4½ mos. at $40.00; ½ mo. at $44; 7 mos. at $45.00; overtime, $7.81¼	524 81
Miss M. McCausland, 4½ mos. at $35.00; 7½ mos. at $40.00; overtime, $31.22	488 72
Miss M. Slute, 4 mos. at $40.00; 5 mos. at $45.00 to March 31st; overtime, $35.66	420 66
Miss A. Tuskingham, 1 week at $7.71; 1 month at $36; 8 mos. at $40.00; overtime, $31.42	395 13
H. Lindsay, 12 mos. to 30th June, $360.00; overtime, $20.74	380 74
E. M. Fewson, 7 mos. to 30th June, $350.00; overtime, $7.48	357 48
Miss A. Bolton, 5 mos. to 30th June	350 00
Miss M. Cartwright, 3 weeks at $7.50; 1½ weeks at $8.75; 4½ mos. at $35.00; 3 mos. at $40.00; overtime, $16.05	329 17
Wm. Fenton, 12 mos. to 30th June	300 00
Miss A. Sands, 5 mos. to 30th June	200 00
J. Hurst, 19th April to 30th June	180 00
Bert Logan, March 19th to 31st at $30.00 per month; $15.93; 3 mos. at $38.00 to 30th June	129 93
C. Ritchings, 2 mos. to Nov. 30th at $50.00; overtime, $1.44	101 44
Farm and Stable Staff ($5,868.40):	
F. Scruby, 12 mos. to 30th June, $900.00; overtime, $247.00	1,147 00
B. Double, 12 mos. to 30th June, $900.00; overtime, $187.50	1,087 50

Connaught Antitoxin Laboratories.—Continued.

C. Smith, 12 mos. to 30th June, $720.00; overtime, $190.00	$910 00	
J. Sherman, 12 mos. to 30th June, $840.00; overtime, $14.50	854 50	
S. Little, 12 mos. to 30th June, $600.00; overtime, $2.50	602 50	
Ralph Riseborough, 9 mos. to March 31st at $60.00	540 00	
K. Little, 12 mos. to 30th June, $470.00; overtime, $8.90	478 90	
Russell Riseborough, 4 mos. and 4 days at $60.00 per month	248 00	
Casual Assistance ($1,868.97):		
Sundry assistants employed for limited periods and emergency work	1,868 97	
		$24,705 09
Laboratory supplies and general maintenance ($37,976.74):		
Aikenhead Architectural Metal Works, blades	$12 40	
Aikenhead Hardware, spark plugs, brooms, hardware	30 51	
John Allan, meat	7 00	
Atlas Stationery Corporation, filter paper	110 16	
Mark Bodger, fodder	20 00	
F. S. Banks & Co., syringes	5,174 56	
H. Barnard, horses, 9 at $65.00; 3 at $60.00; 1 at $55.00; 1 calf, $40.50	860 50	
Wm. Beasley, cutting wood	15 00	
Becton, Dickinson & Co., needles	713 76	
Bell Telephone Co., service 1st July to 30th June	33 00	
Bio-Chemistry Dept., mice	34 10	
Boeckh Co., brushes	23 77	
Bogert & Hopper, boxes	136 54	
B. R. Brown, meat	27 00	
The Bursar, postage supplied	746 00	
W. Buse, blacksmithing	22 35	
Canadian Johns-Manville Co., fire extinguisher	32 72	
Cannon Canadian Co., paste	8 02	
Consumers' Gas Co., gas	293 02	
Wm. Crabb & Co., needles	185 57	
Victor Crispe, fodder	1,623 94	
Dr. T. E. Cunningham, travelling expenses to Buffalo *re* smallpox	8 65	
Major Dean, 1 horse, $50.00; 1 calf, $37.00	87 00	
Dr. R. D. Defries, travelling expenses to Philadelphia	63 71	
Detroit Medical Glass Works, tubes	45 08	
J. E. DeValadores, repairing battery	13 50	
Digestive Ferments Co., chemicals	8 53	
Dominion Express Co., express charges	176 06	
Dominion Glass Co., bottles	403 97	
B. Double, board of farm help	35 00	
E. W. Duke, gasoline	254 00	
T. Eaton Co., dishes, $44.81; supplies, $222.13	266 94	
F. H. Echlin, coal	43 55	
Eimer & Amend, gauze	7 15	
Robert Elder Carriage Works, painting truck	43 75	
E. B. Estes & Sons, boxes	946 80	
Factory Products, Ltd., lamps	6 32	
Fairbank Flour & Feed Supply Co., fodder	447 00	
Fairbank Lumber & Coal Co., posts	8 00	
Faramel, Ltd., faramel	579 50	
Wm. Fenton, cement curbing	61 60	
Fidelity Agency Corporation, insurance on shipment to New Zealand	5 00	
Miss H. Finegan, travelling expenses to Buffalo	5 29	
Firstbrook Bros., Ltd., sawdust	76 25	
F. W. Fisher Co., boxes	415 97	
Hiram Fisher, fodder	23 83	
Dr. J. G. Fitzgerald, disbursements:		
Cartage, express, freight, etc., $174.88; laboratory supplies, $106.59; purchase of small animals, $103.00; car supplies, gasoline, etc., $87.59; car fares, $35.80;		

Connaught Antitoxin Laboratories.—Continued.

stable and farm supplies, $33.15; telegrams and telephone messages, $32.98; office supplies, $26.00; postage and stationery, $10.25; Christmas gratuities, $7.00; sundries, $14.35	$631 59
Dr. W. J. R. Fowler, veterinary services, $10.00; horses, 1 at $55.00; 1 at $50.00; 1 at $40.00; 1 at $35.00	190 00
Dr. D. T. Fraser, travelling expenses to Philadelphia	49 23
Freyseng Cork Co., corks	37 48
Gilliland Laboratories Inc., plasma	7,801 78
Goodyear's India Rubber Selling Co., vaccine bulbs	252 32
Graham's, Ltd., carrots	157 50
Grand & Toy, stationery	7 75
Grand Trunk Railway System, freight on coal	166 88
H. Gray, painting	18 50
Great North Western Telegraph Co., telegrams	66 10
Gutta Percha & Rubber, Ltd., tires, $132.01; rubber corks, etc., $65.63	197 64
W. E. Harries & A. V. Hall, plans	130 00
J. F. Hartz Co., glassware, chemical, etc.	521 23
J. Hewitson, bulbs	7 08
Hinde & Dauch Paper Co., paper	151 13
H. S. Howland & Co., clippers, etc.	15 23
Imperial Oil Co., gasoline and oil	973 62
Ingram & Bell, instruments and supplies	156 46
Frederick Jackson, hay	226 50
A. James, hay	42 53
Wm. James, hay	134 72
D. E. Jones, mice, etc.	36 75
George Keith & Sons, lawn roller	20 00
Kilgour Bros., boxes	18 75
Knight Bros. & Grant, burettes	12 00
Lake Simcoe Ice Supply Co., ice	409 46
Linde Canadian Refrigerator Co., ammonia	46 75
R. Lines, 1 horse at $55; 1 sheep, $21; rabbits, $25.50	101 50
Lockyer Bros., oats	222 00
A. E. Long & Co., box linings	139 56
Lyman Bros. & Co., chemicals, etc.	9 67
McClary Mfg. Co., boilers	9 62
McColl Bros. & Co., oil, soap, etc.	483 10
McFarlane Mfg. Co., ladders	23 33
John McGillian, carrots	313 50
McKenzie Bros., piping, $18.00; cement, $11.25; coal, $96.32	125 57
Macey Office Equipment Co., folders	6 56
Mallinckrodt Chemical Works, chemicals	690 90
Merck & Co., cresol	8 75
Morgan & Co., vaccine tubes	645 83
National Equipment Co., pumps	23 80
New York City Dept. of Health, vaccine	342 19
North Western Steel & Iron Works, packing	7 20
Oakville Nursery Co., shrubs	334 25
Oakwood Garage, automobile	942 10
Ontario Rubber Co., bands	93 47
Parisian Laundry Co., laundry	324 25
Parke, Davis & Co., peptone	64 89
Jas. W. Paton, alcohol	52 75
Perfection Sanitary Brush Co., brushes	13 13
T. Potton, teaming	7 00
Powers-Weightman-Rosengarten Co., chemicals	304 84
Provincial Treasurer of Ontario, auto license	20 00
A. Radford, horseshoeing	52 20
Geo. Ratcliffe, veal	12 25
Tom J. Reid, oats, $65.38; vegetables, $24.00	89 38
Remington Typewriter Co., repairs	25 65
Richards Glass Co., glassware	224 73
J. J. Robertson, rabbits	15 00
R. A. Robotham, repairs to auto	204 45
T. C. Rochford, fodder	13 43

Connaught Antitoxin Laboratories.—Continued.

Rosedale Garage & Livery, storage		$6 58
A. Saywell, harness		37 45
Mrs. J. Sherman, board of help		11 55
R. Sim, oats		75 40
J. A. Simmers, Ltd., seeds		109 02
Ed. Souter, animals		26 15
Geo. Sparrow & Co., boiler, etc.		38 75
Steele Glass Co., glassware		173 49
Gordon Stephenson, mice		5 00
James Stewart, skylight		20 59
Sturgeons, Ltd., solignum		5 69
Superintendent, telephone calls		5 50
Taylor Instrument Co., thermometer		70 63
Arthur H. Thomas Co., burettes		79 74
Thomson, Ahern & Co., shipping charges		50 76
F. L. Thompkins Co., bulbs		126 88
Samuel M. Thorne, twine, paper, etc.		192 75
Toronto Dog & Cat Hospital, animals		344 63
Tuckwell & Smith, casting		5 50
H. C. Tugwell, photographs		8 75
Universal Car Co., repairs to auto		69 97
Universal Coal Co., coal		345 15
University Press, stationery and printing		946 40
W. A. Wallace, oats		708 23
W. O. Ward, meat		10 36
Wm. Weber, mice		24 55
Alf. C. White, milk		69 93
Mary Whittaker, rabbits		8 00
Robert M. Williams, lettering		6 50
John Williamson, fodder		359 83
Woodbridge & Vaughan Telephone Co., 1 year's service to 30th June, 1920		70 10
Roy Woods, calves, 1 at $48.00; 1 at $46.00; 4 at $45.00; 1 at $44.50; 6 at $42.00; 2 at $41.00; 3 at $40.00; 1 at $37.00; fodder, $87.64		897 14
Wrinch, McLaren & Co., needles		111 00
Wrought Iron Range Co., pans		10 65
Items under $5.00 (14)		42 23
Superintendent's Dept., labour, $176.37; material, $157.32..		333 69
		$62,681 83
Less Sundry Credits:		
Canadian Express, loss on shipment.....	$75 00	
Dr. H. C. Cruickshanks, automobile purchased	500 00	
B. Double, ice and manure.....	15 00	
Gilliland Laboratories, sale of vaccine bulbs	49 78	
J. McKenzie, calf skins	120 03	
		$759 81
		$61,922 02

(2) *Surplus Account.*

Balance on 30th June, 1919		$34,997 04
Transferred from Antitoxin Division, balance as shown.....		17,450 06
		$52,447 10
Transferred to Research Division No. 3		50,000 00
At credit of account 30th June, 1920 (Schedule 4b).....		$2,447 10

Connaught Antitoxin Laboratories.—Continued.

(3) *Research Division (Operating).*

At credit of account 30th June, 1919	$20,566 91	
Receipts during 1919-20 (including $3,056.22 interest allowed)	10,785 19	
Accounts receivable on 30th June, 1920	620 34	
Amounts transferred from:		
Antitoxin Division Operating Account	29,574 87	
Surplus Account	50,000 00	
		$111,547 31
Expenditures during 1919-20 (detailed below)	$10,247 96	
Amount transferred to Research Fund	100,000 00	
		$110,247 96
At credit of account 30th June, 1920 (Schedule 4*b*)		$1,299 35

Details of Expenditure.

Salaries, wages and occasional assistance ($3,377.85):	
Dr. A. H. Caulfield, Research Associate, 12 mos. to 30th June	$1,500 00
Dr. D. T. Fraser, Bacteriologist, 4 mos. to 31st October	166 67
P. J. Moloney, Chemist, 7½ mos. to 30th June	656 25
Chas. Greenwood, Research Assistant, 9 mos. to 31st March	630 00
Miss A. Bolton, laboratory assistant, 2½ mos. to 15th Sept.	125 00
Casual assistance ($299.93):	
Sundry assistants employed for limited periods and emergency work	299 93
Laboratory supplies and general maintenance ($6,870.11):	
American Medical Association, reprints	5 92
Wm. Bartlett & Son, shades	12 41
Bell Telephone Co., 12 mos. service to 30th June	52 59
The Bursar, postage supplied	60 50
Canadian Fairbanks Morse Co., storage cells	11 40
Canadian Medical Association, reprints	15 50
Central Scientific Co., resistance box	69 89
Connaught Antitoxin Laboratories, Antitoxin Division, animals	660 10
Dr. J. G. Cunningham, book	10 00
Digestive Ferment Co., chemicals	6 06
Dominion Glass Co., glassware	26 20
T. Eaton Co., coats, etc.	128 87
Wm. Fenton, wire baskets	22 37
Dr. J. G. Fitzgerald, disbursements:	
Cartage, express, freight, etc., $22.82; laboratory supplies, $18.74; subscriptions to periodicals, $9.10; car fares, office supplies and sundries, $9.25	59 91
Grand & Toy, cabinet	13 65
J. F. Hartz Co., glassware, instruments, etc.	1,028 42
H.M. Stationery Office, reports	7 08
Ingram & Bell, chemicals	539 62
Journal of Industrial Hygiene, subscription	6 69
Journal of Infectious Diseases, subscription	7 88
Lake Simcoe Ice Supply Co., ice	42 02
Leeds & Northrup, apparatus	114 33
E. Leworthy, glass-blowing	7 50
Macey Office Equipment Co., stools	56 57
Marine Biological Laboratory, fees	57 50
A. Matthews, Ltd., sterilizer	107 60
McClary Mfg. Co., boilers	19 50
Miller Mfg. Co., coats	30 50
National Committee for Mental Hygiene, subscription	6 60
New York Department of Health, serum	23 02
Ontario Rubber Co., tubing	69 51
Parisian Laundry Co., laundry	113 22
Poulenc Frerés, chemicals	46 16
J. C. Ramsey & Co., plates	8 85
Richards Glass Co., tubing	28 35
Rockefeller Institute for Medical Research, subscription	7 56

Connaught Antitoxin Laboratories.—Continued.

E. S. Souter, mice	$11 00	
Students' Book Department, books	102 95	
Synthetic Drug Co., pipettes	6 00	
Taylor Instrument Co., thermometer	9 38	
A. H. Thomas Co., incubator, etc.	550 98	
Thompson, Ahern Co., shipping charges	7 85	
University Press, stationery, office supplies	105 01	
W. O. Ward, meat	41 79	
Williams & Wilkins Co., subscriptions	28 50	
Wilson & Wilson, needles	317 58	
Wrought Iron Range Co., metal stand	18 95	
Petty items (11)	18 30	
Superintendent's Dept., labour, $1,306.80; material, $811.17; automatic telephone, $50	2,167 97	
		$10,247 96

(4) *Research Fund.*

Transferred from Research Division to this account	$100,000 00	
At credit of account 30th June, 1920 (Schedule 4*b*)		$100,000 00

APPENDIX VI.

Superintendent's Stores and Sundry Labour Account.

Ledger balance, 30 June, 1919		$3,922 42
Purchases made during 1919-20:		
Advance Oil & Supply Co., oil	$146 57	
Aikenhead Hardware, hardware	1,510 00	
American Enameled Magnet Wire Co., wire	162 22	
J. Austin & Sons, lumber	3,710 70	
Automatic Electric Co., telephones	2,023 17	
Babcock & Wilson, copper hose and couplings	47 50	
Baines & David, electrical supplies	17 59	
Baines & Peckover, iron	47 33	
Beardmore Belting Co., belting	48 85	
Bird & Son, roofing	522 00	
Boiler Repair & Grate Bar Co., grates	72 72	
Booth Coulter Copper & Brass Co., plumbers' supplies	222 80	
Batts, Ltd., doors	72 50	
R. Brenner & Co., iron, pipe, etc.	3,377 93	
Geo. Brimston, keys	8 00	
W. R. Brock Co., towels	215 65	
Robt. Bury & Co., wood	513 59	
Builders' Moulding Co., lime, cement, stone, etc.	200 80	
W. Calder & Son, repairs	5 10	
Canada Furniture Co., door handles	14 12	
Canada Hardware Co., hardware	1,924 05	
Canada Lumber Co., flooring	560 35	
Canada Metal Co., bronze	43 13	
Canada Pipe & Steel Co., plugs, pipes, etc.	700 27	
Canadian Asbestos Co., graphite rods	42 00	
Canadian Blower & Forge Co., motor, and erecting same	374 68	
Canadian Ice Machine Co., brushings, etc.	15 10	
Canadian Johns-Manville Co., insulators, etc.	643 96	
Canadian Laco Phillips, electric bulbs	108 67	
Canadian National Institute for the Blind, brooms	80 84	
Canadian S. K. F. Co., bearing	15 60	
John Catto, towels	338 25	
Central Electric Co., conduit, etc.	1,496 09	
Common Sense Mfg. Co., rat poison	6 00	
Consolidated Plate Glass Co., glass	790 65	
Crane, Ltd., plumbers' merchandise	4,266 73	
W. H. Cunningham, glue	11 88	
Dalite Electric Co., lamps	243 69	
Darling Bros., filter cloth	12 00	
Dearborn Chemical Co., Dearborn feed water treatment	182 30	
Diamond Cleanser Mfg. Co., powder	13 00	
H. Disston & Sons, saw files	5 85	
Dodge Mfg. Co., pulley	7 00	
Dominion Radiator Co., boiler, heater, etc.	1,310 73	
C. A. Dunham Co., radiator, traps, etc.	1,266 97	
Dunlop Tire & Rubber Co., hose	36 17	
Eagle Lock Co., locks and keys	211 15	
T. Eaton Co., supplies	372 16	
E. B. Eddy Co., paper, matches, etc.	681 97	
Engineering Specialties, valve	22 50	
Factory Products, electrical supplies	6,141 04	
Faculty Union, sink	7 50	
Fox & Co., lumber	50 40	
Garlock Packing Co., packing	245 50	
Good Mfg. Co., plumbers' supplies	193 80	
Goodyear Tire & Rubber Co., hose	59 92	
Gordon MacKay Co., towels, cotton, etc.	424 67	
Gurney Foundry Co., hot plate, ash-pan, etc.	143 46	
T. H. Hancock, lumber	3,749 99	
Handy Supply Mfg. Co., brushes	6 48	
E. Hansard, caining chairs	11 00	
Hardware Co. of Toronto, hardware	598 78	
Geo. M. Hendry Co., electroplate, crayons, etc.	137 52	

Superintendent's Stores and Sundry Labour Account.—Continued.

Higgins & Burke, soap, etc.	$310 45
H. S. Howland, saw files	8 91
Imperial Munitions Board, steamfitters' and plumbers' supplies	8,724 70
Independent Electric Lamp Co., lamps	426 30
Interlake Tissue Mills, towels	853 15
Johnson Temperature Regulator Co., rubber diaphragm...	7 70
A. M. Judd, lamps, etc.	1,054 60
J. B. Keeble & Co., stormtight plastic	48 96
Warden King, plumbers' supplies	540 65
T. Kinnear, soap	139 04
R. Laidlaw & Co., lumber	757 01
J. Leckie, rope	22 77
Lever Bros., soap	61 00
A. P. Lintz, connections, batteries, etc.	991 06
J. T. W. Low, felt, webbing	20 25
Lyman Bros. & Co., drugs	132 91
J. Macdonald, blankets	15 88
N. Macdonald, paper	19 46
Majestic Electric Supply Co., heaters	159 52
Martin Sales Agency, soap	10 50
A. Matthews, pipe, tank, etc.	125 37
Geo. A. Matthews, motor	10 00
McColl Bros., ore	247 04
McCormack & Carroll, carving	58 00
McFarlane Mfg. Co., ladders	65 36
Meakins & Sons, brushes	9 85
Medland Bros., bon ami, soap, etc.,	20 89
Jas. Morrison Brass Mfg. Co., plumbers' and electricians' supplies	2,969 74
Mott Co., plumbers' supplies	684 66
J. Mudrick, conduit pipe	750 00
Mudrick & McFarlane, piping	589 42
A. Muirhead Co., carpenters' supplies	155 81
Murphy Iron Works, roust box, etc.	888 51
North American Contract & Mfg. Co., blacklead	11 00
Northern Electric Co., electrical supplies	1,974 01
Geo. Nunn, trays, zinc, etc.	53 88
Ontario Lime Co., cement, fire clay	98 37
Ontario Soap & Oil Co., soap	678 30
Panels, Ltd., oak	50 15
Sanderson, Pearcy & Co., paints, etc.	5,192 28
Peckover's, Ltd., steel plate, etc.	71 83
Pathological Dept., air pump and motor	55 45
Perfection Sanitary Brush Co., brushes	125 79
Perkins, Ince & Co., soap, etc.	20 60
N. L. Piper Railway Supply Co., oil, lanterns, etc.	59 50
Queen City Brass Co., castings	155 95
Queen City Glass Co., glass	121 00
Queen City Sales Co., hair brooms	17 67
Rand Co., index tabs	27 40
Geo. Rathbone, door	10 00
Renfrew Electric Products Co., tools	27 83
R. Robertson & Sons, brick	46 20
Roofers' Supply Co., plumbers' supplies	210 97
Routery Bros., plastering	24 00
Ruud Mfg. Co., tank heaters	141 40
Sangamo Electric Co., meters	173 00
Schaeffer & Budenberg, charts	7 38
Scythes & Co., twine	28 90
R. Simpson Co., soap, pails, mop cloths, etc.	508 67
J. B. Smith & Sons, lumber	2,046 25
N. Smith, leather belting	16 40
Soclean, Ltd., mops, cloths, etc.	12 85
Standard Foundry, casting	39 60
Stewart & Foster, Ltd., paints	18 87
Stewart & Wood, paints	19 50

Superintendent's Stores and Sundry Labour Account.—Continued.

Sturgeons, Ltd., paint	$33 00	
Talbot & Talbot, wipers	30 00	
Seth Thomas Co., clocks	92 10	
S. M. Thorne, mop cloths, etc.	199 88	
Toronto Plate Glass Co., glass	50 50	
Toronto Sign Co., signs	23 00	
Toronto Wood Turning Co., wood turning	35 00	
Triplex Weather Stripping Co., weather stripping	16 00	
Turnbull Electric Mfg. Co., electrical supplies	18 55	
U.S. Industrial Alcohol Co., alcohol	149 49	
Universal Sales Co., cleaning supplies	59 50	
West Disinfecting Co., fumigation	12 00	
Weston Electric Instrument Co., instruments	80 47	
J. Whitfield, drilling	18 48	
A. R. Williams Machinery Co., machinery	753 37	
C. B. Williams Co., lumber	274 37	
W. C. Wilson, waste	63 44	
Wert Co., electrical supplies	20 35	
Fred Wood & Sons, saws repaired	20 10	
Freight charges	538 12	
University Press, stationery	56 95	
Items under $5.00 (12)	31 42	
		$75,993 50
		$79,915 92
Sundry labour, as per pay lists:		
Carpenters	$23,825 74	
Electricians	11,985 73	
Painters	8,404 39	
Plumbers and steamfitters	16,133 29	
Labourers, firemen, etc.	10,468 87	
Cleaners	26,788 20	
		$97,606 22
		$177,522 14

Apportionment of the foregoing:

	Labour.	Material.
Administration ($17,375.88):		
Bursar's Office	$955 34	$396 73
Registrar's Office	20 18	3 20
Library Building	1,276 50	305 90
Library Current	264 88	300 84
Gymnasium Student's Union, Athletics	7 56	7 71
Convocation Hall	1,260 21	531 64
Grounds	7,966 41	1,151 89
Examinations	74 79	.....
Convocation Expenses	40 34	.....
Telephones	245 50	2,549 38
Roll of Service	16 88	.....
Faculty of Arts ($33,758.99):		
Main Building	9,306 57	3,825 29
Biological Building	1,552 94	404 03
Biological Department	1,259 08	841 30
Botany Department	424 71	443 60
Bio-Chemistry Department	1,408 02	889 79
Physiological Department	156 09	307 06
Chemical Building	1,836 31	599 80
Chemical Department	2,122 40	1,702 53
Physical Chemistry Department	5 39	.....
Physics Building	2,065 94	529 87
Physics Department	2,144 24	755 74
Astro-Physics Department	42 33	23 69
Geology Department	3 14	14 48
Mineralogy Department	11 87	24 93
Psychological Department	148 01	129 86
Mechanics Department	8 40	8 17

Superintendent's Stores and Sundry Labour Account.—Continued.

	Labour.	Material.
Political Science Building	$276 85	$330 76
Political Science Department	117 76	38 04
Faculty of Medicine ($7,299.16):		
Anatomical Department	69 93	177 41
Pathological Department	321 74	112 22
Chemical Pathology Department	37 46	98 27
Pharmacy Department	50 05	56 17
Medicine, Department of	17 65	14 13
Maintenance of Building, 1 Queen's Park	266 53	81 96
Surgery, Department	77 98	156 28
Obstetrics and Gynæcology Department	57 25	25 77
Hygiene Department	263 57	172 90
Medical Building	2,403 76	961 55
Pathological Building	1,432 15	244 36
General Expenses	77 15	122 92
Faculty of Applied Science ($18,930 80):		
Mining Building	3,030 91	514 23
Engineering Building	3,051 41	559 81
Old Y. M. C. A. Building	102 87	48 79
Thermodynamics Building	636 18	309 13
Geodetic Observatory Building	141 98	204 25
Electrical Engineering Department	99 94	262 21
Mechanical Engineering Department	271 42	238 50
Applied Mechanics Department	15 02	42 11
Mining Engineering Department	182 70	174 69
Metallurgical Engineering Department	145 73	35 37
Surveying Department	2,551 95	4,074 77
Applied Chemistry Department	324 97	196 34
Electro Chemistry Department	213 53	119 64
Architecture Department	139 19	87 55
Drawing Department	516 57	415 40
Department of Engineering Physics and Photography	38 96	34 71
General Expenses	108 66	41 31
Faculty of Household Science ($3,273.98):		
Household Science Building	2,125 01	838 45
Household Science Department and General Expenses	270 79	39 73
Faculty of Education ($4,535.89):		
Education Building	2,680 30	749 79
Education Building Annex	372 21	214 41
Education Department	326 81	192 37
Faculty of Forestry ($822.54):		
Forestry Building	449 13	347 44
Forestry Department	12 32	13 65
University Extension and Social Service Courses ($1,079.25):		
University Extension	.....	85
Social Service Building	882 53	141 87
Social Service Department	31 11	22 89
Residences ($9,167.29):		
Men's Residences	4,869 58	1,290 55
Women's Residence Building	1,130 13	940 56
Women's Residence, Housekeeping Account	.....	75 71
Women's Residences, 92 and 94 St. George Street:		
Building	65 50	63 56
Housekeeping Account	.....	5 26
University College Women's Union Building	459 44	195 29
University College Women's Union Housekeeping Account	.....	71 71
Royal Ontario Museum	5,480 19	2,759 71
Central Power Plant	2,515 19	2,614 40
Special Research	1,438 08	3,677 36

Superintendent's Stores and Sundry Labour Account.—Continued.

	Labour.	Material.	
University Press	$245 96	$193 60	
Connaught Antitoxin Laboratories, Antitoxin Division	176 37	157 32	
Connaught Antitoxin Laboratories, Research Division	1,306 80	811 17	
Alterations and repairs to sundry properties, various incidental accounts, etc.	14,384 66	18,646 21	
Work done for members of the staff, etc. (including accounts receivable on 30 June, 1920 ($2,733.56)	6,718 26	6,290 63	
Sundry cash sales	.....	546 38	
Accounts written off as uncollectable	.....	18 71	
	$97,606 22	$66,618 56	
			$164,224 78
Ledger balance 30th June, 1920			$13,297 36

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